GenCore version 5.1.6

Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - nucleic search, using frame_plus_p2n model

Run on: February 12, 2004, 19:34:21 ; Search time 93.2699 Seconds
(without alignments)
1750.959 Million cell updates/sec

Title: US-08-978-217-16_COPY_2_371
Perfect score: 1980
Sequence: 1 AATCEISNVFSNYFNAMYSS..........YKFGKNSSGWKEEVGESRN 370

Scoring table: BLOSUM62
Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters: 1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Command line parameters:
-MODEL=frame+_p2n.model -DEV=xlh
-Q=/cgn2.1/USPTO_spool/US08978217/runat_10022004_133826_20481/app_query.fasta_1.1500
-DB=Issued_PatentB_NA -QFMT=fastap -SUFFIX=rni -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15
-MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-USER=US08978217_@CGN_1_115 @runat_10022004_133826_20481 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Match	Query Match	Length	DB	ID	Description
1	1707	86.2	1707	1907	4	US-09-300-958A-27	Sequence 27, Appl
2	1707	86.2	1707	1907	4	US-09-570-593-4	Sequence 4, Appli
3	1707	86.2	1703	1920	1	US-08-746-789A-1	Sequence 1, Appli
4	803	40.6	502	502	4	US-09-389-681-282	Sequence 282, App
5	803	40.6	502	502	4	US-09-620-405B-282	Sequence 282, App
6	803	40.6	502	502	4	US-09-339-338-282	Sequence 282, App
7	803	40.6	502	502	4	US-09-433-826B-282	Sequence 282, App
8	803	40.6	502	502	4	US-09-604-287A-282	Sequence 282, App
9	586	29.6	5427	5510	3	US-09-009-913-2	Sequence 2, Appli
10	580	29.3	5510	5667	3	US-09-009-913-3	Sequence 3, Appli
11	580	29.3	5667	852	3	US-09-009-913-4	Sequence 4, Appli
c 12	543	27.4	543	852	3	US-09-020-956-44	Sequence 44, Appl
c 13	543	27.4	543	852	3	US-09-030-607-44	Sequence 44, Appl
c 14	543	27.4	543	852	4	US-09-439-313-44	Sequence 44, Appl
c 15	543	27.4	543	852	4	US-09-352-616A-44	Sequence 44, Appl
c 16	543	27.4	543	852	4	US-09-232-149A-44	Sequence 44, Appl
17	507	25.6	507	848	3	US-09-009-913-338	Sequence 338, App
18	435.5	22.0	435.5	2280	3	US-09-009-913-8	Sequence 8, Appli
19	435.5	22.0	435.5	2428	3	US-09-009-913-10	Sequence 10, Appl
20	435.5	22.0	435.5	2498	3	US-09-016-434-927	Sequence 927, App
21	270	13.6	270	237	1	US-08-368-281-1	Sequence 1, Appli
22	238.5	12.0	238.5	2975	1	US-08-878-177-3	Sequence 3, Appli
23	238.5	12.0	238.5	3240	1	US-09-570-593-1	Sequence 1, Appli
24	234.5	11.8	234.5	1528	4	US-09-055-113-2	Sequence 2, Appli
25	233.5	11.8	233.5	1894	4	US-08-306-691B-43	Sequence 12, Appl
26	233.5	11.8	233.5	1905	3	US-08-306-691B-43	Sequence 43, Appl
27	233.5	11.8	233.5	3317	1	PCT-US93-06251-9	Sequence 9, Appli
28	225.5	11.4	225.5	1604	1	US-08-878-177-1	Sequence 1, Appli
29	225.5	11.4	225.5	1604	5	US-08-343-443B-3	Sequence 3, Appli
30	225	11.4	225	1447	1	US-09-344-579-1	Sequence 1, Appli
31	225	11.4	225	2938	2	US-09-360-779-1	Sequence 1, Appli
32	220	11.1	220	2268	3	US-09-435-335-1	Sequence 1, Appli
33	214	10.8	214	1752	1	US-09-920-759-3	Sequence 3, Appli
34	214	10.8	214	1933	1	US-09-920-759-10	Sequence 10, Appl
35	214	10.8	214	1976	4	US-09-213-767-1	Sequence 1, Appli
36	214	10.8	214	2266	2	US-09-920-759-11	Sequence 11, Appl
37	202.5	10.2	202.5	665	4	US-08-469-412A-1	Sequence 1, Appli
38	198	10.2	198	2667	3	US-09-021-715-1	Sequence 1, Appli
39	180.5	9.1	180.5	2667	3	US-08-780-835B-1	Sequence 1, Appli
40	180.5	9.1	180.5	2410	3	US-09-300-268-1	Sequence 1, Appli
41	179	9.0	179	2410	3	US-09-116-049-1	Sequence 1, Appli
42	179	9.0	179	2410	3	US-08-884-363-1	Sequence 1, Appli
43	179	9.0	179	2410	3	US-08-875-944B-1	Sequence 1, Appli
44	179	9.0	179	2410	3		Sequence 1, Appli
45	177	8.9	177	2064	3		Sequence 1, Appli

ALIGNMENTS

RESULT 1
US-09-300-958A-27

; Sequence 27, Application US/09300958A
; Patent No. 6495319
; GENERAL INFORMATION:
; APPLICANT: McClelland, John
; APPLICANT: Welsh, John
; APPLICANT: Trenkle, Thomas
; TITLE OF INVENTION: Reduced Complexity Nucleic Acid Targets and Methods of
; TITLE OF INVENTION: Using Same
; FILE REFERENCE: P-PH 3457
; CURRENT APPLICATION NUMBER: US/09/300,958A
; CURRENT APPLICATION DATE: 1999-04-27
; PRIOR APPLICATION NUMBER: 60/083,331
; PRIOR FILING DATE: 1998-04-27
; PRIOR APPLICATION NUMBER: 60/098,070
; PRIOR FILING DATE: 1998-08-27
; PRIOR APPLICATION NUMBER: 60/118,624
; PRIOR FILING DATE: 1999-02-04
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 27
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-300-958A-27

Alignment Scores:
Pred. No.: 1.64e-172   Length: 1907
Score: 1707.00   Matches: 322
Percent Similarity: 92.72%   Conservative: 22
Best Local Similarity: 86.79%   Mismatches: 25
Query Match: 86.21%   Indels: 2
DB: 4   Gaps: 2

US-08-978-217-16_COPY_2_371 (1-370) x US-09-300-958A-27 (1-1907)

```
Qy    360  TrpLysGluGluValGlyGluSerArgAsn 370
Db   1176  TGGAAGGAGGAAGAGGTTCCAGAGTCGGAAC 1208

RESULT 2
US-09-570-593-4
; Sequence 4, Application US/09570593
; Patent No. 6566063
; GENERAL INFORMATION:
;   APPLICANT: Kaufmann, Joerg
;   APPLICANT: Xin, Hong
;   APPLICANT: Harrowe, Greg
;   TITLE OF INVENTION: EXPRESSION OF ETS-DOMAIN PROTEINS IN
;   TITLE OF INVENTION: CANCER
;   FILE REFERENCE: 2300-1556
;   CURRENT APPLICATION NUMBER: US/09/570,593
;   CURRENT FILING DATE: 2000-05-12
;   PRIOR APPLICATION NUMBER: 60/134,112
;   PRIOR FILING DATE: 1999-05-14
;   NUMBER OF SEQ ID NOS: 13
;   SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 4
;   LENGTH: 1907
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (96)...(1211)
;   OTHER INFORMATION: Human epithelial-restricted with serine box (ESX)
;   OTHER INFORMATION: protein.
US-09-570-593-4

Alignment Scores:
Pred. No.:                              Length:        1907
Score:              1707.00             Matches:        322
Percent Similarity: 92.72%             Conservative:     22
Best Local Similarity: 86.79%          Mismatches:       25
Query Match:        86.21%             Indels:            2
DB:                                     Gaps:             2

US-08-978-217-16_COPY_2_371 (1-370) x US-09-570-593-4 (1-1907)

Qy    1  AlaAlaThrCysGluIleSerAsnValPheSerAsnAlaMetTyrSerSer 20
Db   99  GCTGCAACCTGTGAGATTAGCAACATTTTAGCAACTACTTCAGTGCGATGTACAGCTCG 158

Qy   21  GluAspProThrLeuAlaProAlaPro---ThrThrPheGlyThrGluAspLeuVal 39
Db  159  GAGGACTCCACCCTGGCCTCGTCCCCCTGTTCCCCACCTTTGGGGCCGATGACTTGGTA 218

Qy   40  LeuThrLeuAsnAsnGlnGlnMetThrLeuGluGlyProGluLysAlaSerTrpThrSer 59
Db  219  CTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAGGCCAGCTGGTTGGGG 278

Qy   60  GluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpIleSerTyrGlnValGlu 79
Db  279  GAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGAGTGGATCAGCTACCAAGTGGAG 338

Qy   80  LysAsnLysTyrAspAlaSerIleAspPheSerArgCysAsnMetAspGlyAlaThr 99
Db  339  AAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGCGGCCACC 398

Qy  100  LeuCysSerCysAlaLeuGluGluLeuArgLeuValPheGlyLeuValPheGlyGlnLeu 119
Db  399  CTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGGCTCTGGGGACCAACTC 458

Qy  120  HisAlaGlnLeuArgAspLeuThrSerAsnSerAspLeuLeuSerTrpIleIleGlu 139
Db  459  CATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTGATGAGCTCAGTTGGATCATTGAG 518

Qy  140  LeuLeuGluLysAspGlyMetSerPheGlnGluSerLeuGlyAspLeuGlyProPheAsp 159
Db  519  CTGCTTGGAGAAGATGGCATGGCCTTCCAGGAGGCCCTA---GACCCAGGCCCTTTGAC 575
```

```
Qy    1  AlaAlaThrCysGluIleSerAsnValPheSerAsnAlaMetTyrSerSer 20
Db   99  GCTGCAACCTGTGAGATTAGCAACATTTTAGCAACTACTTCAGTGCGATGTACAGCTCG 158

Qy   21  GluAspProThrLeuAlaProAlaPro---ThrThrPheGlyThrGluAspLeuVal 39
Db  159  GAGGACTCCACCCTGGCCTCGTCCCCCTGTTCCCCACCTTTGGGGCCGATGACTTGGTA 218

Qy   40  LeuThrLeuAsnAsnGlnGlnMetThrLeuGluGlyProGluLysAlaSerTrpThrSer 59
Db  219  CTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAGGCCAGCTGGTTGGGG 278

Qy   60  GluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpIleSerTyrGlnValGlu 79
Db  279  GAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGAGTGGATCAGCTACCAAGTGGAG 338

Qy   80  LysAsnLysTyrAspAlaSerIleAspPheSerArgCysAsnMetAspGlyAlaThr 99
Db  339  AAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGCGGCCACC 398

Qy  100  LeuCysSerCysAlaLeuGluGluLeuArgLeuValPheGlyLeuValPheGlyGlnLeu 119
Db  399  CTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGGCTCTGGGGACCAACTC 458

Qy  120  HisAlaGlnLeuArgAspLeuThrSerAsnSerAspLeuLeuSerTrpIleIleGlu 139
Db  459  CATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTGATGAGCTCAGTTGGATCATTGAG 518

Qy  140  LeuLeuGluLysAspGlyMetSerPheGlnGluSerLeuGlyAspLeuGlyProPheAsp 159
Db  519  CTGCTTGGAGAAGATGGCATGGCCTTCCAGGAGGCCCTA---GACCCAGGCCCTTTGAC 575

Qy  160  GlnGlySerProPheAlaGlnLeuLeuAspAspGlyArgGlnAlaSerProTyrTyr 179
Db  576  CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCTTACCAC 635

Qy  180  CysSerThrTyrGlyProGlyAlaProSerProGlySerSerSerAspValSerThrAlaArg 199
Db  636  CCCGGCACTGTGGGCCGCAGGAGCCCCTCCCGGCAGCTCTCCACCGCAGGG 695

Qy  200  ThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAsp 219
Db  696  ACTGGTGCTTCTCGGACCTCCACTCTGCAGACTCCCGTGGAAGTGACGTGGACCTGGAT 755

Qy  220  LeuThrGluSerLysValPheLeuProArgAspAspPheThrArgTyrTyrLysLysGlyLysGluPro 239
Db  756  CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 815

Qy  240  LysHisGlyLysLysArgLysSerArgProArgArgLysGlnLeuSerLeuGluSerLysTyrTyrAspCys 259
Db  816  AAGCACGGGAAGCGGAAACGGAGCCGGCCGCGGAAGCAAAGAGTAGTCGGGACTGT 875

Qy  260  LeuGluGluLysLysLysSerLysHisAlaProArgArgGlyThrHisLeuTrpGluPheIleArg 279
Db  876  CTCGAGGGCAAGAAGAGCAAGCACGCCCCCAGAGGCACCCACCTGTGGGGAGTTCATCCGG 935

Qy  280  AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 299
Db  936  GACATCCTCATCCACCCAGAGCTCAACGAGGGCCTTCATGAAGTGGGAATCGGCATGAA 995

Qy  300  GlyValPheLysPheLeuPheSerGluLeuArgSerGluLeuAlaValAlaLeuGlnLeuTrpGlyIleGlnLysLysLys 319
Db  996  GGCGTTCTTCAAGTTCCTGCGCTCCGAGCTGGCTGTGGGCCAACTATGGGGCCAAAAGAAAAAG 1055

Qy  320  AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysLysArgGlu 339
Db 1056  AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAAACGGGAG 1115

Qy  340  IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 359
Db 1116  ATCCTTGGAGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1175
```

```
                    NAME: William T. Han
                    REGISTRATION NUMBER: 34,344
                    REFERENCE/DOCKET NUMBER: ATG 50024
                    TELECOMMUNICATION INFORMATION:
                      TELEPHONE: 610 270 5219
                      TELEFAX:   610 270 4026
                    INFORMATION FOR SEQ ID NO:  1:
                    SEQUENCE CHARACTERISTICS:
                      LENGTH:  1920
                      TYPE: Nucleic Acid
                      STRANDEDNESS: Single
                      TOPOLOGY: Linear
                      ANTI-SENSE: No
                    US-08-746-789A-1

Alignment Scores:
Pred. No.:                 1.66e-172          Length:               1920
Score:                     1707.00            Matches:               322
Percent Similarity:        92.72%             Conservative:           22
Best Local Similarity:     86.79%             Mismatches:             25
Query Match:               86.21%             Indels:                  2
DB:                        1                  Gaps:                    2

US-08-978-217-16_COPY_2_371 (1-370)  x  US-08-746-789A-1 (1-1920)

Qy     1 AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer  20
           ||| || |||  ||  |||  ||  |||||||||||  |||||||||||||||
Db   118 GCTGCAACCTGTGAGATTAGCAACATTTTAGCAACTACTTCAGTGCGATGTACAGCTCG  177

Qy    21 GluAspProThrLeuAlaProAlaProPro---ThrThrPheGlyThrGluAspLeuVal  39
           ||||||||||||  ||||  ||||||||       :|:||||||  ||||  |||||||
Db   178 GAGGACTTCCACCTTGGCTCTGTTCCCCTGCTGTCCCACCTTTGGGCGATGACTTGGTA  237

Qy    40 LeuThrLeuAsnGlnGlnMetThrLeuGluGlyProGluLysAlaSerTrpThrSer  59
           |||  |||||  ||  | |||  |||||||||||||||||||||  ||||||  ||
Db   238 CTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCTAGCTGGTTGGGG  297

Qy    60 GluArgProGlnPheThrSerLysThrGlnValLeuGluTrpIleSerTyrGlnValGlu  79
           ||||  |||  ||||  ||||||  ||  |||||||||||  |||||||||  ||||||
Db   298 GAACAGCCCCAGTTCTGGTCAGAGACGCAGGTTCTGGACTGGATCAGCTTACCAAGTGGAG  357

Qy    80 LysAsnLysTyrAspAlaSerSerIleAspPheSerArgCysAsnMetAspGlyAlaThr  99
           |||||  |||  ||  |||  ||  ||  |:||||  ||  |:|:||||  ||||||
Db   358 AAGAACAAGTACGACGCAAGCCCCATTGACTTCTCACGATGTAACATGGATGGGGCCACC  417

Qy   100 LeuCysSerCysAlaAlaLeuGluGluLeuLeuArgLeuValPheGlyProLeuGlnLeu  119
           |||  |  |||  |||  |||||||  |  ||  |||  ||||  ||||  ||||||
Db   418 CTCTGCAATTGTGCCCTTGAGGAGTGCGTCTGGTCTTTGGGCCTTCTGGGGGACCAACTC  477

Qy   120 HisAlaGlnLeuArgAspLeuThrSerAsnSerAspAsnPheSerGluLeuSerTrpIleIleGlu  139
           |||||  ||  | ||  ||||  ||||||||||  |||||||||||  ||||||  ||
Db   478 CATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGTCAGTTGGATCATTGAG  537

Qy   140 LeuLeuGluLysAspLeuAspGlyMetSerPheGlnLeuSerLeuGlyLysAspLeuProPheAsp  159
           ||||  |||||  ||||||  ||  ||| :||  ||  |||||||||||  |||
Db   538 CTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTA--GACCCAGGGCCCTTTGAC  594

Qy   160 GlnGlySerProPheAlaGlnLeuLeuLeuAspAspGlyArgGlnAlaSerProTyrTyr  179
           |||||||||  |||||  |||  ||  ||||  || |||  |||||||
Db   595 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGACAGCGTCAGCAAGCCAGCCCCTACCAC  654

Qy   180 CysSerThrTyrGlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArg  199
           |||||||  ||||  |||  ||  ||||||||||||||||  ||||||  |||  ||||
Db   655 CCCGGCAGCTGTGGCGCAGGAGCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG  714

Qy   200 ThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAsp  219
           |||  |  ||||  |  ||  |||||||||  ||||  |||||  |||  |||||||
Db   715 ACTGTGCTTCCTCGGAGCTCCCACTCCTCAGAGCTCCGGTGGAAGTGACGTGGACCTGGAT  774

Qy   220 LeuThrGluSerLysValPheProArgAspPheThrAspTyrLysLysGlyLysGluPro  239
           |  ||  |||  |||||  |||  ||  |||||||||||||||
Db   775 CCCACTGAGTCAAGCTCTTCCCAGCGATGGTTTCGTGACTGACAGAAGGGGGATCCC  834
```

```
Qy   160 GlnGlySerProPheAlaGlnLeuLeuLeuAspAspGlyArgGlnAlaSerProTyrTyr  179
           |||  |||||  |||||  |||  ||  ||||  || |||  |||||||
Db   576 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGACAGCGTCAGCAAGCCAGCCCCTACCAC  635

Qy   180 CysSerThrTyrGlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArg  199
           |||||||  ||||  |||  ||  ||||||||||||||||  ||||||  |||  ||||
Db   636 CCCGGCAGCTGTGGCGCAGGAGCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG  695

Qy   200 ThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAsp  219
           |||  |  ||||  |  ||  |||||||||  ||||  |||||  |||  |||||||
Db   696 ACTGTGCTTCCTCGGAGCTCCCACTCCTCAGAGCTCCGGTGGAAGTGACGTGGACCTGGAT  755

Qy   220 LeuThrGluSerLysValPheProArgAspPheThrAspTyrLysLysGlyLysGluPro  239
           |  ||  |||  |||||  |||  ||  |||||||||||||||
Db   756 CCCACTGAGTCAAGCTCTTCCCAGCGATGGTTTCGTGACTGACAGAAGGGGGATCCC  815

Qy   240 LysHisGlyLysArgLysArgGlyArgProArgLysSerGluLysArgGlyTrpAspCys  259
           ||||||||  |||  |||||  ||  |||  |||||  ||  |||  |||  ||||||
Db   816 AAGCACGGGGAGAAACGAGGCCGGCCCCGAAAGAGTGAGCAAAGAGTACTGGGACTGT  875

Qy   260 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg  279
           |||||  |||||  ||  |||||  ||||  ||||  ||||  |||||||  ||||
Db   876 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG  935

Qy   280 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetGlyTrpGluAsnArgHisGlu  299
           |||  |  |||  ||||  ||  |||||  |  ||||  ||||||||  ||  ||||||
Db   936 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA  995

Qy   300 GlyValPheLysPheLeuArgSerGluAlaAlaValAlaGlnLeuTrpGlyLysLysLys  319
           |||||  |||  ||||  |||||  ||  || ||  |  |||||  |||  |||||||||
Db   996 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGCGGTGGCCCAACTATGGGGCCAAAAGAAAAG  1055

Qy   320 AsnSerAsnMetThrGluLeuSerArgAlaMetArgTyrTyrTyrLysArgLysSerGlu  339
           ||  |||  ||  ||  |||||  |||  ||||||||||||  ||||  ||||||  ||
Db  1056 AACAGCAACATGACCTACGAGAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG  1115

Qy   340 IleLeuGluLeuArgValAspProGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly  359
           |  ||  ||||  |||  |||||  ||  ||  |||  ||||  |  ||||  |||||
Db  1116 ATCCTGGAGCTGCGGGTGGATGCCGGACGTCGCTGGTGTACAAGTTTGGCAAAAACTCAAGCGGC  1175

Qy   360 TrpLysGluGluValGlyGluSerArgAsn  370
           :||||||||||  ||||||||
Db  1176 TGGAAGGAGGAAGAGGTTCCCAGAGTCGGAAC  1208
```

```
RESULT 3
US-08-746-789A-1
; Sequence 1, Application US/08746789A
; Patent No. 5789200
GENERAL INFORMATION:
  APPLICANT:  Ismail Kola, Martin J. Tymms, Christine DeBouck
  TITLE OF INVENTION: A No. 5789200el Human ETS Family Member, ELF3
  NUMBER OF SEQUENCES:  4
  CORRESPONDENCE ADDRESS:
    ADDRESSEE:  SmithKline Beecham Corporation
    STREET:  709 Swedeland Road, P.O. Box 1539
    CITY:  King of Prussia
    STATE:  PA
    COUNTRY:  USA
    ZIP:  19406-0939
  COMPUTER READABLE FORM:
    MEDIUM TYPE:  DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
    COMPUTER:  IBM 486
    OPERATING SYSTEM:  WINDOWS FOR WORKGROUPS
    SOFTWARE:  MICROSOFT WORD
  CURRENT APPLICATION DATA:
    APPLICATION NUMBER:  US/08/746,789A
    FILING DATE:  No. 5789200ember 15, 1996
    CLASSIFICATION:  514
  PRIOR APPLICATION DATA:
    APPLICATION NUMBER:
    FILING DATE:
  ATTORNEY/AGENT INFORMATION:
```

Qy   240 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 259
         |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   835 AAGCACGGGAAGCGGAAACAGGGCCGGCCCCGAAGCTGAGCAAAGAGTACTGGGACTGT 894

Qy   260 LeuGluGlyLysLysSerHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 279
         |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   895 CTCGAGGGCAAGAAGAGCAAGCACGCGCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 954

Qy   280 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 299
         |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   955 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1014

Qy   300 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyInLysLysLys 319
         |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1015 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGCCAAAAGAAAAG 1074

Qy   320 AsnSerAsnMetThrTyrGluLysSerArgAlaMetArgTyrTyrTyrLysArgGlu 339
         |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1075 AACAGCAACATGACCTACGAGAAGTCGAGCCGGGCCATGAGGTACTACTACAAACGGGAA 1134

Qy   340 IleLeuGluArgValAspGlyArgLeuValPheTyrLysPheGlyLysAsnSerSerGly 359
         |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1135 ATCCTGGAACGGGTGGATGGCCGGCTCGTCTTCTACAAGTTTGGCAAAAACTCAAGCGGC 1194

Qy   360 TrpLysGluGluGlnValGlyGlySerArgAsn 370
         |||||||||||:::|||||||||||||
Db 1195 TGGAAGGAGGAGAGGTTCTCCAGAGTCGGAAC 1227

RESULT 4
US-09-389-681-282
; Sequence 282, Application US/09389681A
; Patent No. 6518237
; GENERAL INFORMATION:
;   APPLICANT: Yuqui, Jiang
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.470C3
;   CURRENT APPLICATION NUMBER: US/09/389,681A
;   CURRENT FILING DATE: 1999-09-02
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-389-681-282

Alignment Scores:
Pred. No.:
Score: 7.91e-77   Length: 502
Percent Similarity: 803.00   Matches: 149
Best Local Similarity: 93.33%   Conservative: 5
Query Match: 90.30%   Mismatches: 11
DB: 40.56%   Indels: 0
                                           Gaps: 0

US-08-978-217-16_COPY_2_371 (1-370) x US-09-389-681-282 (1-502)

Qy   184 GlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArgThrAlaThrPro 203
         |||||||||||||||||||||||||||||||||||||||||||||||||| |||
Db   6 GGGCCAGGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGGCAGCGACCTGGTGCTTCT 65

Qy   204 GlnSerSerHisAlaSerArgGlyValGlySerAspValAspLeuAspLeuThrGluSer 223
         :::||||||||||||||||||||||:||||||||||||||||||||||||:::
Db   66 CGGAGCTCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACTGGACTGATCCCACTGATGGC 125

Qy   224 LysValPheProArgAspAspPheThrAspTyrArgLysGlyGluProLysHisGlyLys 243
         |||||||||||||||||||||||||||:::|||||||||||||||||||
Db   126 AAGCTCTTCCCCAGCAGCGATGGTTTTCGTGACTGCAAGAAGGGGATCCCAAGCACGGAAG 185

Qy   244 ArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeuGluGlyLys 263

RESULT 5
US-09-620-405B-282
; Sequence 282, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
;   APPLICANT: Jiang, Yuqiu
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Harlocker, Susan L.
;   APPLICANT: Hepler, William T.
;   TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
;   FILE REFERENCE: 210121.470C8
;   CURRENT APPLICATION NUMBER: US/09/620,405B
;   CURRENT FILING DATE: 2000-07-20
;   NUMBER OF SEQ ID NOS: 495
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-620-405B-282

Alignment Scores:
Pred. No.:
Score: 7.91e-77   Length: 502
Percent Similarity: 803.00   Matches: 149
Best Local Similarity: 93.33%   Conservative: 5
Query Match: 90.30%   Mismatches: 11
DB: 40.56%   Indels: 0
                                           Gaps: 0

US-08-978-217-16_COPY_2_371 (1-370) x US-09-620-405B-282 (1-502)

Qy   184 GlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArgThrAlaThrPro 203
         |||||||||||||||||||||||||||||||||||||||||||||||||| |||
Db   6 GGGCCAGGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGGCAGCGACCTGGTGCTTCT 65

Qy   204 GlnSerSerHisAlaSerArgGlyValGlySerAspValAspLeuAspLeuThrGluSer 223
         :::||||||||||||||||||||||:||||||||||||||||||||||||:::
Db   66 CGGAGCTCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACTGGACTGATCCCACTGATGGC 125

Qy   224 LysValPheProArgAspAspPheThrAspTyrArgLysGlyGluProLysHisGlyLys 243
         |||||||||||||||||||||||||||:::|||||||||||||||||||
Db   126 AAGCTCTTCCCCAGCAGCGATGGTTTTCGTGACTGCAAGAAGGGGATCCCAAGCACGGAAG 185

Qy   244 ArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeuGluGlyLys 263
         |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   186 CGGAAAACAGGGCCGGCCCCGAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGGCAAG 245

Qy   264 LysSerHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeuIle 283
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   246 AAGAGCAAGCACGCGCCAGAGGCACCCACCTGTGGGAGTTCATCCGGACATCCTCATC 305

Qy   284 HisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPheLys 303
         |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   306 CACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAG 365

Qy   304 PheLeuArgSerGluAlaValAlaGlnLeuTrpGlyInLysLysLysAsnSerAsnMet 323
         |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   366 TTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGCCAAAAGAAAAGAACAGCAACATG 425

Qy   324 ThrTyrGluLysSerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuGluArg 343
         |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   426 ACCTACGAGAAGTCGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGAACGG 485

Qy   344 ValAspGlyArgArg 348
         ||||||||||||
Db   486 GTGGATGGCCGGGCA 500

Qy 264 LysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeuIle 283
        ||||||||||||||||||||||||||||||||||||||||||||||||
Db 246 AAGAGCAAGCACGCGCCCAGAGGCACCCACCTGGGAGTTCATCCGGGACATCCTCATC 305

Qy 284 HisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPheLys 303
        |||||||||||||||||||||||||||||||||||||||||||
Db 306 CACCCGGAGCTCAACGAGGGCCTGATGAAGTGGGAGAATCGGCATGAGGGCGTCTTCAAG 365

Qy 304 PheLeuArgSerGluAlaValAlaAlaGlnLeuTrpGlyGlnLysLysAsnSerAsnMet 323
        ||||||||||||||||||||||||||||
Db 366 TTCCTGCGCTCCGAGGCTGTGGCCGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAACATG 425

Qy 324 ThrTyrGluLysSerArgAlaMetArgTyrTyrLysArgGluIleLeuGluArg 343
        |||||||||||||||||||||||
Db 426 ACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGAACGG 485

Qy 344 ValAspGlyArgArg 348
        |||||||||||
Db 486 GTGGATGGCCGGCGA 500

RESULT 6
US-09-339-338-282
; Sequence 282, Application US/0939338A
; Patent No. 6573368
; GENERAL INFORMATION:
;   APPLICANT: Yuqiu, Jiang
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.470C2
;   CURRENT APPLICATION NUMBER: US/09/339,338A
;   CURRENT FILING DATE: 1999-06-23
;   NUMBER OF SEQ ID NOS: 315
;   SOFTWARE: FastSEQ for Windows Version 3.0
;   SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-339-338-282

Alignment Scores:
Pred. No.:   Length: 502
Score: 7.91e-77   Matches: 149
Percent Similarity: 803.00   Conservative: 5
Best Local Similarity: 93.33%   Mismatches: 11
Query Match: 90.30%   Indels: 0
                        40.56%   Gaps: 0
                        4

US-08-978-217-16_COPY_2_371 (1-370) x US-09-339-338-282 (1-502)

Qy 184 GlyProGlyAlaProSerProGlySerSerAspValSerSerThrAlaArgThrAlaThrPro 203
        ||||||||||||||||||||||||||||||||||||||||||||
Db   6 GGGCGCAGGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCT 65

Qy 204 GlnSerSerHisAlaSerAspSerGlySerAspValAlaAspLeuAspLeuThrGluSer 223
        |||||||||||||||||||| |::::: |||
Db   66 CGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGACCTGGACTGATGGC 125

Qy 224 LysValPheProArgAspAspPheThrArgTyrLysGlyGlyHisGlyLys 243
        :::|||||||||||||| ||
Db 126 AAGCTCTTCCCCAGCGATGGTTTTCGTGACTGGACGGGGGGATCCCAAGCACGGGAAG 185

Qy 244 ArgLysArgGlyArgProLysLeuSerLysGluTyrTrpAspCysLeuGluLysLys 263
        ||||||||||||||||||||||||||
Db 186 CGGAAACGACGAGGCCCCCAGAAAGCTGAGCAAAGATACTGGAGATTGTCTGGAGGGCAAG 245

Qy 264 LysSerLysHisAlaAlaProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeuIle 283
        |||||||||||||||||||||||||
Db 246 AAGAGCAAGCACGCGCCCAGAGGCACCCACCTGGGAGTTCATCCGGGACATCCTCATC 305

Qy 284 HisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPheLys 303
        |||||||||||||||||||||||||||||||||||||||||||

Db 306 CACCCGGAGCTCAACGAGGGCCTGATGAAGTGGGAGAATCGGCATGAGGGCGTCTTCAAG 365

Qy 304 PheLeuArgSerGluAlaValAlaAlaGlnLeuTrpGlyGlnLysLysAsnSerAsnMet 323
        ||||||||||||||||||||||||||||
Db 366 TTCCTGCGCTCCGAGGCTGTGGCCGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAACATG 425

Qy 324 ThrTyrGluLysSerArgAlaMetArgTyrTyrLysArgGluIleLeuGluArg 343
        |||||||||||||||||||||||
Db 426 ACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGAACGG 485

Qy 344 ValAspGlyArgArg 348
        |||||||||||
Db 486 GTGGATGGCCGGCGA 500

RESULT 7
US-09-433-826B-282
; Sequence 282, Application US/09433826B
; Patent No. 6579973
; GENERAL INFORMATION:
;   APPLICANT: Jiang, Yuqui
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Harlocker, Susan L.
;   TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.470C4
;   CURRENT APPLICATION NUMBER: US/09/433,826B
;   CURRENT FILING DATE: 1999-11-03
;   NUMBER OF SEQ ID NOS: 474
;   SOFTWARE: FastSEQ for Windows Version 3.0
;   SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-433-826B-282

Alignment Scores:
Pred. No.:   Length: 502
Score: 7.91e-77   Matches: 149
Percent Similarity: 803.00   Conservative: 5
Best Local Similarity: 93.33%   Mismatches: 11
Query Match: 90.30%   Indels: 0
DB: 40.56%   Gaps: 0
                        4

US-08-978-217-16_COPY_2_371 (1-370) x US-09-433-826B-282 (1-502)

Qy 184 GlyProGlyAlaProSerProGlySerSerAspValSerSerThrAlaArgThrAlaThrPro 203
        ||||||||||||||||||||||||||||||||||||||||||||
Db   6 GGGCGCAGGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCT 65

Qy 204 GlnSerSerHisAlaSerAspSerGlySerAspValAlaAspLeuAspLeuThrGluSer 223
        |||||||||||||||||||| |::::: |||
Db   66 CGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGACCTGGACTGATGGC 125

Qy 224 LysValPheProArgAspAspPheThrArgTyrLysGlyGlyHisGlyLys 243
        :::|||||||||||||| ||
Db 126 AAGCTCTTCCCCAGCGATGGTTTTCGTGACTGGACGGGGGGATCCCAAGCACGGGAAG 185

Qy 244 ArgLysArgGlyArgProLysLeuSerLysGluTyrTrpAspCysLeuGluLysLys 263
        ||||||||||||||||||||||||||
Db 186 CGGAAACGACGAGGCCCCCAGAAAGCTGAGCAAAGATACTGGAGATTGTCTGGAGGGCAAG 245

Qy 264 LysSerLysHisAlaAlaProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeuIle 283
        |||||||||||||||||||||||||
Db 246 AAGAGCAAGCACGCGCCCAGAGGCACCCACCTGGGAGTTCATCCGGGACATCCTCATC 305

Qy 284 HisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPheLys 303
        |||||||||||||||||||||||||||||||||||||||||||
Db 306 CACCCGGAGCTCAACGAGGGCCTGATGAAGTGGGAGAATCGGCATGAGGGCGTCTTCAAG 365

Qy 304 PheLeuArgSerGluAlaValAlaAlaGlnLeuTrpGlyGlnLysLysAsnSerAsnMet 323

```
Db    366 |||||||||||
          TTCCTGCCTCCGAGGCTGTGGCCAACTATGGGCCAAAGAAAAAGAACAGCAACATG 425
Qy    324 ThrTyrGluLysLeuSerArgArgAlaMetArgTrpTyrTyrTyrLysArgGluIleLeuGluArg 343
          ||||||||||||||||||||||||
Db    426 ACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGAACGG 485
Qy    344 ValAspGlyArgArg 348
          |||||||||||
Db    486 GTGGATGGCCGGCGA 500
```

RESULT 8
US-09-604-287A-282
; Sequence 282, Application US/09604287A
; Patent No. 6586572
; GENERAL INFORMATION:
;   APPLICANT: Jiang, Yuqiu
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Harlocker, Susan L.
;   APPLICANT: Hepler, William T.
;   TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
;   FILE REFERENCE: 210121.470C7
;   CURRENT APPLICATION NUMBER: US/09/604,287A
;   CURRENT FILING DATE: 2000-06-22
;   NUMBER OF SEQ ID NOS: 489
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-604-287A-282

Alignment Scores:
Pred. No.:
Score: 803.00 $7.91e-77$
Percent Similarity: 93.33%
Best Local Similarity: 90.30%
Query Match: 40.56%
DB: 4

                        Length: 502
                        Matches: 149
                        Conservative: 5
                        Mismatches: 11
                        Indels: 0
                        Gaps: 0

US-08-978-217-16_COPY_2_371 (1-370) x US-09-604-287A-282 (1-502)

```
Qy    184 GlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArgThrAlaThrPro 203
          |||||||||||||| : ||||||||||||
Db      6 GGCGAGCAGGAGCCCCTCCCCCGGCAGTCTGACGTCTCCACCGCAGGACTGGTGCTTCT 65
Qy    204 GlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAspLeuThrGluSer 223
          :|||||||||||:||: |||||| |||||||
Db     66 CGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGACTCCCACTGATGGC 125
Qy    224 LysValPheProArgAspAspPheThrArgTyrLysGlyGlyHisGlyLysLys 243
          |||:|||| ||||: |||||||||||||||
Db    126 AAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGAGGGGATCCCAAGCACGGGAAG 185
Qy    244 ArgLysArgGlyArgProArgLysSerLeuSerLysGluTrpAspArgLysLys 263
          ||||||||||||||||||||||
Db    186 CGGAAACCGAGGCCGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGGCAAG 245
Qy    264 LysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheArgAspIleLeuIle 283
          |||||||||||||||
Db    246 AAGAGCAAGCACGGGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTCATC 305
Qy    284 HisProLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPheLys 303
          |||||||
Db    306 CACCCCGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAG 365
Qy    304 PheLeuArgSerGluAlaValAlaAlaGlnLeuTrpProGlyGlnLysLysAsnSerAsnMet 323
          ||||||
Db    366 TTCCTGCGCTCGGAGGCTGTGGCCGCCCAACTATGGGGCCCAAAGAAAAAGAACAGCAACATG 425
```

```
Qy    324 ThrTyrGluLysLeuSerArgArgAlaMetArgTrpTyrTyrTyrLysArgGluIleLeuGluArg 343
          ||||||||||||||||||||||||
Db    426 ACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGAACGG 485
Qy    344 ValAspGlyArgArg 348
          |||||||||||
Db    486 GTGGATGGCCGGCGA 500
```

RESULT 9
US-09-009-913-2
; Sequence 2, Application US/09009913
; Patent No. 6087485
; GENERAL INFORMATION:
;   APPLICANT: AxyS Pharmaceuticals, Inc.
;   TITLE OF INVENTION: Asthma Related Genes
;   NUMBER OF SEQUENCES: 339
;   CORRESPONDENCE ADDRESS:
;   ADDRESSEE: Bozicevic & Reed, LLP
;   STREET: 285 Hamilton Ave, Suite 200
;   CITY: Palo Alto
;   STATE: CA
;   COUNTRY: USA
;   ZIP: 94301
;   COMPUTER READABLE FORM:
;   MEDIUM TYPE: Diskette
;   COMPUTER: IBM Compatible
;   OPERATING SYSTEM: DOS
;   SOFTWARE: FastSEQ for Windows Version 2.0
;   CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/09/009,913
;   FILING DATE: 21-JAN-1998
;   CLASSIFICATION:
;   PRIOR APPLICATION DATA:
;   APPLICATION NUMBER:
;   FILING DATE:
;   ATTORNEY/AGENT INFORMATION:
;   NAME: Sherwood, Pamela J
;   REGISTRATION NUMBER: 36,677
;   REFERENCE/DOCKET NUMBER: SEQ-4P
;   TELECOMMUNICATION INFORMATION:
;   TELEPHONE: 650-327-3231
;   TELEFAX: 650-327-3231
;   TELEX:
; INFORMATION FOR SEQ ID NO: 2:
;   SEQUENCE CHARACTERISTICS:
;   LENGTH: 5427 base pairs
;   TYPE: nucleic acid
;   STRANDEDNESS: double
;   TOPOLOGY: linear
;   MOLECULE TYPE: cDNA
US-09-009-913-2

Alignment Scores:
Pred. No.:
Score: 586.00 $4.64e-52$
Percent Similarity: 50.26%
Best Local Similarity: 36.91%
Query Match: 29.60%
DB: 3

                        Length: 5427
                        Matches: 141
                        Conservative: 51
                        Mismatches: 86
                        Indels: 104
                        Gaps: 11

US-08-978-217-16_COPY_2_371 (1-370) x US-09-009-913-2 (1-5427)

```
Qy     26 AlaProAlaProProThrThr----------PheGlyThrGluAspLeuValLeuThr 41
          |||:: ||||||
Db     84 GCTGCCTCCCCTCCATCAGCCACCAGCTATTGGATTTCCACCCAGAATCTTTAGGTA--- 140
Qy     42 LeuAsnAsnGlnGlnMetThrLeuGluGly- 51
          |||::: ||||||
Db    141 -----AATGAGATCATGATTCTGGAAGGAGGTGGTGAATGAATCTCAACCCCGGCAAC 194
Qy     52 --------ProGluLysAlaSerTrpThrSerGlu 60
          |||::||||||
Db    195 AACTTCCTTCACCAGCCCGCCAGCCTGGACAGCAGCTACTCCACGTGCAATGTTTCCAGT 254
```

GENERAL INFORMATION:
  APPLICANT: AxyS Pharmaceuticals, Inc.
  TITLE OF INVENTION: Asthma Related Genes
  NUMBER OF SEQUENCES: 339
  CORRESPONDENCE ADDRESS:
    ADDRESSEE: Bozicevic & Reed, LLP
    STREET: 285 Hamilton Ave, Suite 200
    CITY: Palo Alto
    STATE: CA
    COUNTRY: USA
    ZIP: 94301
  COMPUTER READABLE FORM:
    MEDIUM TYPE: Diskette
    COMPUTER: IBM Compatible
    OPERATING SYSTEM: DOS
    SOFTWARE: FastSEQ for Windows Version 2.0
  CURRENT APPLICATION DATA:
    APPLICATION NUMBER: US/09/009,913
    FILING DATE: 21-JAN-1998
    CLASSIFICATION:
  PRIOR APPLICATION DATA:
    APPLICATION NUMBER:
    FILING DATE:
  ATTORNEY/AGENT INFORMATION:
    NAME: Sherwood, Pamela J
    REGISTRATION NUMBER: 36,677
    REFERENCE/DOCKET NUMBER: SEQ-4P
  TELECOMMUNICATION INFORMATION:
    TELEPHONE: 650-327-3231
    TELEFAX: 650-327-3231
    TELEX:
INFORMATION FOR SEQ ID NO: 3:
  SEQUENCE CHARACTERISTICS:
    LENGTH: 5510 base pairs
    TYPE: nucleic acid
    STRANDEDNESS: double
    TOPOLOGY: linear
  MOLECULE TYPE: cDNA
US-09-009-913-3

```
Alignment Scores:
Pred. No.:                              Length:        5510
Score:                 2.08e-51         Matches:       129
Percent Similarity:    580.00           Conservative:  43
Best Local Similarity: 54.43%           Mismatches:    78
Query Match:           40.82%           Indels:        66
DB:                    29.29%           Gaps:          7
                       3

US-08-978-217-16_COPY_2_371 (1-370) x US-09-009-913-3 (1-5510)

Qy   57 TrpThrSerGluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpIleSerTyr 76
           :::|:|:  |||||:|:|||::::|||
Db  356 TGGCATGAAATTCATCCTCAGTACTGGACCAAGTACCAGGTGTGGGAGTGGCTCAGCAC 415
Qy   77 GlnValGluLysAsnLysTyrAspAlaSerIleAspPheSerArgCysAsnMetAsp 96
           |||||:  :::||:|||||||||
Db  416 CTCCTGGACACCAACCAGCTGGATGCCAATTGTATCCCTTTCCAAGAGTTCGACATCAAC 475
Qy   97 GlyAlaThrLeuCysSerCysAlaLeuGluGluLeuArgLeuValProLeuGly 116
           :::||||
Db  476 GGGGAGCGACCTCGTCGCAGCATGAGTTGCAGGAGGTTCACCCGGGACGAGCGGCGGGG 535
Qy  117 AspGlnLeuHisAlaGlnLeuArgAspLeuThrSerAsn---------SerSerAspGlu 133
           |||  :::|||
Db  536 CAGCTCCTCTCACAGACCAACTTGCAGCATCTGAAGCTGGAACGGCCAGTGCAGTAGTGAC--- 592
Qy  134 LeuSerTrpIleIleGluLeuLeuLysAspGlyMetSerPheGlnSerLeuGly 153
           |||
Db  593 ----...CTGTTCCAGTGCCACACACAAT 613
Qy  154 AspLeuGlyProPheAspGlnGlySerProPheAlaGlnGluGluLeuAspAspGlyArg 173
           |||  :::
Db  614 GTCATTGTCAAGACTGAACAAAACTGAGCCT------TCCATCATGAACACCTGGAA 664
```

```
Qy   61 --------ArgProGlnPheTrpSerLysThrGlnVal 70
                 |||||
Db  255 GGGTTTTTGGAGGCCAGTGGCATGAAATTCATCCTCAGTACTGGACCAAGTACCAGGTG 314
Qy   71 LeuGluTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerIleAspPhe 90
           ||||::  :::::|||
Db  315 TGGGAGTGGCTCCAGCACCTCCTGGACACCAACCAGCTGGATGCCAATTGTATCCCTTTC 374
Qy   91 SerArgCysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluGluLeuArgLeu 110
           ::::|:|:::||::||||||
Db  375 CAAGAGTTCGACATCAACGGCGAGCACCTCTGCAGCATGAGTTTGCAGGAGTTCACCCGG 434
Qy  111 ValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerAsn--- 129
           |||||||
Db  435 GCGGCAGGGACGCGCGGGCAGCTCCTCTCACAGCAACTTGCAGCATCTGAAGTGGAACGGC 494
Qy  130 -----SerSerAspGluLeuSerTrpIleIleGluLeuLeuLysAspGlyMetSer 147
           ||||||
Db  495 CAGTGCAGTAGTGAC--------CTG 512
Qy  148 PheGlnSerLeuGlyAspLeuGlyProPheAspGlnGlySerProPheAlaGlnGlu 167
           :::  :::
Db  513 TTCCAGTGCCACACAATGTCATTGTCAAGACTGAACAAACTGAGCCT------TCC 563
Qy  168 LeuLeuAspAspGlyArgGlnAlaSerProTyrTyrCysSerThrTyrTyrProGlyAla 187
           ::::::::  ||||||
Db  564 ATCATGAACACCTGGAAGACAGAGAACTATTATATGACACCAACTATGGT------ 614
Qy  188 ProSerProGlySerSerAspValSerThrAlaArgThrAlaArgProGlnSerSerHis 207
           ||||||
Db  615 --------AGCACA 620
Qy  208 AlaSerAspSerGlyGlySerAspValAspLeuThrGluSerLysValPhePro 227
           ||||||
Db  621 ----GTAGATTTGTTGGACAGCAGCAAAACTTTCTGC 650
Qy  228 ArgAspAspPhe------ThrAspTyrTyrLysLysGlyGluProLysHisGlyGly 242
           :::  |||
Db  651 CGGGGCCTCAGATCTCCATGACACCAGTCACCTTCCTGTTGCAGAGTCACCTGATATG 710
Qy  243 LysArgLysArgGlyArgProArgLysSerLeuSerGlyLeuSerGluTyrTrpAspCysSerLeuGluGly 262
           ::::::|  |||||:
Db  711 AAAAAGGAGCAAGACACCCCCTGCCAGTGCCACCAAA------ 749
Qy  263 LysLysSerLysHisAlaAlaProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeu 282
           |||||
Db  750 --------AAGCACAACCCGAGAGGGGACTCCACTTATGGGAATTCATCCGCGACAATCCTC 800
Qy  283 IleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPhe 302
           :::::::::  :::||||||
Db  801 TTGAACCCCAGACAAGAGACCCCAGGATTAATAAAAATGGAAGACCGATCTGAGGGCGTCTTC 860
Qy  303 LysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLysAsnSerAsn 322
           :::::  :::||||||
Db  861 AGGTTCTTGAAATCAGAGGCAGTGGCTCAGCTGTGGGGTAAAAAGAAGAACAACAGCAGC 920
Qy  323 MetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuGlu 342
           ||||||||||||||||||||
Db  921 ATGACCTATGAAAAGCTGAGCCGAGCTATGAGATATTACTACAAAAGAGAAATACTGGAG 980
Qy  343 ArgValAspGlyArgArgLeuValTyrLysPheLysGlyAsnSerSerGlyTrpLysGlu 362
           :::::::  :::||||||
Db  981 CGTGTGGATGGGACGAAGACTGGTATAAAATTTGGGAGAGATGCCCGAGGATGGGAGAGAA 1040
Qy  363 GluGlu 364
        ||||||
Db 1041 AATGAA 1046
```

RESULT 10
US-09-009-913-3
; Sequence 3, Application US/09009913
; Patent No. 6087485

```
;                    TELEPHONE:  650-327-3231
;                    TELEFAX:    650-327-3231
;                    TELEX:
; INFORMATION FOR SEQ ID NO: 4:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 5667 base pairs
;     TYPE:  nucleic acid
;     STRANDEDNESS:  double
;     TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA
US-09-009-913-4

Alignment Scores:
Pred. No.:                              Length:              5667
Score:                  2.17e-51        Matches:              129
Percent Similarity:     580.00          Conservative:          43
Best Local Similarity:  54.43%          Mismatches:            78
Query Match:            40.82%          Indels:                66
                        29.29%          Gaps:                   7
DB:

US-08-978-217-16_COPY_2_371 (1-370) x US-09-009-913-4 (1-5667)

Qy    57  TrpThrSerGluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpIleSerTyr  76
              :::    ||||||  ||| :::  |||||
Db   513  TGGCATGAAATTCATCCTCAGTACTGGACCAAGTACCAAGGTGTGGGAGTGGTTCCAGCAC  572

Qy    77  GlnValGluLysAsnLysTyrAspAlaSerIleAspPheSerArgCysAsnMetAsp   96
              :::::  ||||||| :::  |||  |||   |||
Db   573  CTCCGGACCAACCAGCTGGATGCCAATTGTATCCCTTTCCAAGAGTTCGACATCAAC  632

Qy    97  GlyAlaThrLeuCysSerCysAlaLeuGluLeuArgLeuValPheGlyProLeuGly  116
                ||||||   ||||   :::   ||||||
Db   633  GGCGAGCACCCTCTGCAGCATGAGTTGCGAGAGTTCACCCGGGGGCCAGGGACGGGGG  692

Qy   117  AspGlnLeuHisAlaGlnLeuArgAspLeuThrSerAsn-----SerSerAspGlu  133
              ||||||           :::
Db   693  CAGTCCTCTACAGCAACCTGCAGCATCTGAAGTGGACGGCCAGTGCAGTAGTGAC---  749

Qy   134  LeuSerTrpIleIleGluLeuLeuLeuLysAspLysPheGluSerLeuGly  153
                                                              :::
Db   750  -------------------------------------------CTGTTCCAGTCCACACACAT  770

Qy   154  AspLeuGlyProPheAspGlnGlyGlySerProPheAlaGlnGluLeuAspAspGlyArg  173
              ::::::                        |||
Db   771  GTCATTGTCAAGACTGAACAAACTGAGCCT-------TCCATCATGAACACCTGAAA  821

Qy   174  GlnAlaSerProTyrTyrCysSerThrTyrGlyProGlyAlaProSerProGlySerSer  193
              ::: :::    |||    |||
Db   822  GACGAGAACTATTTATATGACACCAACTATGGT  854

Qy   194  AspValSerThrAlaArgThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGly  213
              ::: |||
Db   855  ------AGCACA-----------------------------------------------  860

Qy   214  SerAspValAspLeuAspLeuThrGluSerLysValPheProArgAspAspPhe------  231
              :::||||| :::  |||
Db   861  -------GTAGATTTGTTGGACAGCAAAACTTTCTGCCGGGCTCAGATCTCCATG  908

Qy   232  -------ThrAspTyrLysLysGlyHisLysProLysHisGlyLysArgLysArgGlyArg  248
              :::
Db   909  ACAACCACCAGTCACCTTCCTGTGCAGAGTCACCTGATATGAAAAAGGAGCAAGAGACCCC  968

Qy   249  ProArgLysLeuSerLysGluGluLysLysGluGlyLysLysSerLysHisAla  268
              :::
Db   969  CCTGCCAAGTGCCACACCAAA-------------------------AAGCACAAC  998

Qy   269  ProArgGlyThrHisLeuTrpGluPheGluArgAspIleHisProGluLeuAsn  288
              :::||||| ::: |||
Db   999  CCGAGAGGGACTCACTTATGGACGGAATTCATCCGGACAATCCTTGAACCCAGACAAGAAC  1058

Qy   289  GluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPheLysPheArgSerGlu  308
              :::
Db  1059  CCAGGATTAATAAAATGGGAGAAGAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAG  1118
```

```
Qy   174  GlnAlaSerProTyrTyrCysSerThrTyrGlyProGlyAlaProSerProGlySerSer  193
              ::: :::    |||   ||||||
Db   665  GACGAGAACTATTTATATGACACCAACTATGGT--------  697

Qy   194  AspValSerThrAlaArgThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGly  213
              ||||||
Db   698  ------AGCACA------------------------------------------------  703

Qy   214  SerAspValAspLeuAspLeuThrGluSerLysValPheProArgAspAspPhe------  231
              :::||||| :::  |||
Db   704  -------GTAGATTTGTTGGACAGCAAAACTTTCTGCCGGGCTCAGATCTCCATG  751

Qy   232  -------ThrAspTyrLysLysGlyHisLysProLysHisGlyLysArgLysArgGlyArg  248
              :::
Db   752  ACAACCACCAGTCACCTTCCTGTGCAGAGTCACCTGATATGAAAAAGGAGCAAGAGACCCC  811

Qy   249  ProArgLysLeuSerLysGluGluLysLysGluGlyLysLysSerLysHisAla  268
              :::
Db   812  CCTGCCAAGTGCCACACCAAA-------------------------AAGCACAAC  841

Qy   269  ProArgGlyThrHisLeuTrpGluPheGluArgAspIleLeuIleHisProGluLeuAsn  288
              :::
Db   842  CCGAGAGGGACTCACTTATGGAGAATTCATCCCGACATCCCTTGAACCCCAGACAAGAAC  901

Qy   289  GluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPheLysPheLysArgSerGlu  308
              :::
Db   902  CCAGGATTAATAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTCAGAAATCAGAG  961

Qy   309  AlaValAlaGlnLeuThrProGlyValLysLysLysAsnSerAsnMetThrTyrGluLysLeu  328
              :::
Db   962  GCAGTGGCTCAGCTATGGGTAAAAAGAAGAACAACAAGCAGCATGACCTTATGAAAAGCTC  1021

Qy   329  SerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuLeuArgValAspGlyArgArg  348
              :::
Db  1022  AGCCGAGCTATGAGATATTACTACAAAAGAGAAATACTGGAGCGTGTGGATGGACCGAAGA  1081

Qy   349  LeuValTyrLysPheGlyLysAsnSerGlyTrpLysGlyGluGlu  364
              :::
Db  1082  CTGGTTATATAAAATTTGGGAAGAATGCCCGAGGATGGAAGAGAAAATGAA  1129
```

RESULT 11
US-09-009-913-4
; Sequence 4, Application US/09009913
; Patent No. 6087485
;
GENERAL INFORMATION:
;   APPLICANT: Axys Pharmaceuticals, Inc.
;   TITLE OF INVENTION: Asthma Related Genes
;   NUMBER OF SEQUENCES: 339
;   SOFTWARE: FastSEQ for Windows Version 2.0
;   CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/09/009,913
;   FILING DATE: 21-JAN-1998
;   CLASSIFICATION:
;   PRIOR APPLICATION DATA:
;   APPLICATION NUMBER:
;   FILING DATE:
;   ATTORNEY/AGENT INFORMATION:
;   NAME: Sherwood, Pamela J
;   REGISTRATION NUMBER: 36,677
;   REFERENCE/DOCKET NUMBER: SEQ-4P
;   TELECOMMUNICATION INFORMATION:

CORRESPONDENCE ADDRESS:
;   ADDRESSEE: Bozicevic & Reed, LLP
;   STREET: 285 Hamilton Ave, Suite 200
;   CITY: Palo Alto
;   STATE: CA
;   COUNTRY: USA
;   ZIP: 94301
COMPUTER READABLE FORM:
;   MEDIUM TYPE: Diskette
;   COMPUTER: IBM Compatible
;   OPERATING SYSTEM: DOS

```
Qy  309 AlaValAlaGlnLeuTrpGlyGlnLysLysLysAsnSerAsnMetThrTyrGluLysLeu 328
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1119 GCAGTGGCTCAGCTATGGGTAAAAAAGAGAACACAGCAGCATGACCTATGAAAAGCTC 1178

Qy  329 SerArgAlaMetArgTyrTyrLysArgValIleLeuGluArgValAspGlyArgArg 348
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1179 AGCCGAGCTATGAGATATTACTACAAAAGAGAAATACTGGAGCGTGTGGATGGACGAAGA 1238

Qy  349 LeuValTyrLysPheGlyLysAsnSerSerGlyTrpLysGluGluGlu 364
        |||||||||||||||||||||||||||||||||||||||||||
Db 1239 CTGGTATATAAATTTGGGAAGAATGCCCGAGGATGGAGAGAAAATGAA 1286
```

RESULT 12
US-09-020-956-44/c
; Sequence 44, Application US/09020956
; Patent No. 6261562
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillin, Davin C.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY OF PROSTATE CANCER AND METHODS FO
; NUMBER OF SEQUENCES: 178
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: WA
; COUNTRY: USA
; ZIP: 98104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/020,956
; FILING DATE: 09-FEB-1998
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Maki, David J.
; REGISTRATION NUMBER: 31,392
; REFERENCE/DOCKET NUMBER: 210121.427C2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 44:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 852 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; ORIGINAL SOURCE:
; ORGANISM: Homo sapiens
US-09-020-956-44

Alignment Scores:		
Pred. No.:	1.06e-48	
Score:	543.00	Length: 852
Percent Similarity:	54.28%	Matches: 124
Best Local Similarity:	40.79%	Conservative: 41
Query Match:	27.42%	Mismatches: 73
DB:		Indels: 66
		Gaps: 7

US-08-978-217-16_COPY_2_371 (1-370) x US-09-020-956-44 (1-852)

```
Qy  69 GlnValGluGluTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerSerIle 88
       |||||::|||:|||||::||||:::::|||:|||:||::||::::||:|
Db 850 CAGGTGTGGGAGTGGCTCATCACCTCCTGGACCACCAACCAGCTGATGCCAATTGTATC 791

Qy  89 AspPheSerArgCysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluLeu 108
       |||    ||:|:||     |||:||:|||:::|||||:|||||:|||:||||
Db 790 CCTTTCCANGAGTTCGACATCACCGGCGAGCACCTTTGCAGCATGAGTTTGCAGGAGTTC 731
```

RESULT 13
US-09-030-607-44/c
; Sequence 44, Application US/09030607
; Patent No. 6262245
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillon, Davin C.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY OF PROSTATE CANCER AND METHODS FO
; NUMBER OF SEQUENCES: 224
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: WA
; COUNTRY: USA
; ZIP: 98104

```
Qy 109 ArgLeuValPheGlyLeuTrpGlyGlnLeuHisAlaGlnLeuArgAspLeuThrSer 128
       |||:::||||
Db 730 ACCCGGGGCAGCAGGACGCGGGGCAANCTCCTCACAGCAACTTGGCATCTGAAGTGG 671

Qy 129 Asn-------SerSerAspGluLeuSerTrpIleIleGluLeuGluLeuLysAspGly 145
       |||       ||||||
Db 670 AACGGCCAGTGCAGTAGTGAC 650

Qy 146 MetSerPheGlnGluSerLeuGlyAspGlyProPheGlnGlySerProPheAla 165
       :::   :::||||
Db 649 --CTGTTCCAGTCCACACAATGTCATTGTCAAGACTGAACAAACTGAGCCT------ 599

Qy 166 GlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyrCysSerThrTyrGlyPro 185
       :::::::::                                :::
Db 598 ---TCCATCGAACACCTGGAAAGACNAGACACTATTTATGACACCAACTATGGT--- 545

Qy 186 GlyAlaProSerProGlySerAspValSerThrAlaArgThrAlaThrProGlnSer 205
       ||||||
Db 544 AGCACA 539

Qy 206 SerHisAlaSerAspSerGlySerAspValAspLeuThrGluLysLysVal 225
       ::||||||
Db 538 --------GTAGATTTGTTGGACAGCAAAACT 515

Qy 226 PheProArgAspAspPhe----------ThrAspTyrLysLysGlyGluProLys 240
       |||                      :::
Db 514 TTCTGCCGGGCTCAGATCTCCATGCAACCACCAGTCACCTTCCTGTTGCAGAGTCACCT 455

Qy 241 HisGlyLysArgLysArgProArgLysLeuSerLysGluTyrTrpAspCysLeu 260
       |:::::::::                              :::
Db 454 GATATGAAAAAGAGGAGCAAGACCCCCCTGCCAAGTGCCACACCAAA 410

Qy 261 GluGlyLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAsp 280
       |||                   |||||||||
Db 409 ---------AAGCACAACCCGAGAGGACTCACTTATGGAATTCATCCGCGAC 365

Qy 281 IleLeuIleHisProLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGly 300
       |||||||||:::|||||||||||||||||:::
Db 364 ATCCTCTTGAACCCAGCAAGAACCCAGGATTAATAAAAATGGAGGACCGATCCTGAGGGC 305

Qy 301 ValPheLysPheLeuArgSerGluAlaValAlaGlnLeuAsnLeuTrpGlyGlnLysLysAsn 320
       |||::|:||||||:::::::||||
Db 304 GTCTTCAGGTTCTTGAAATCAGAGGAGGCTGCTCAGCTATGGGTAAAAAAGAAGAACAAC 245

Qy 321 SerAsnMetThrTyrGluLysSerArgAlaMetArgTyrTyrLysArgValIle 340
       |||||||||||||||||:::
Db 244 AGCAGCATGACCTATGAAAAGTCAGCGAGCTATGGAGATATTACTACAAAAGAGAAATT 185

Qy 341 LeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerGlyTrp 360
       |||||||||||||||||||||||||||||||||||:::::::
Db 184 CTGGAGCGTGTGGATGGACGAAGACTGGTATATAAATTTGGGAAGAATGCCCGAGGATGG 125

Qy 361 LysGluGluGlu 364
       :::|||
Db 124 AGAGAAATGAA 113
```

```
;   COMPUTER READABLE FORM:
;     MEDIUM TYPE:  Floppy disk
;     COMPUTER:  IBM PC compatible
;     OPERATING SYSTEM:  PC-DOS/MS-DOS
;     SOFTWARE:  PatentIn Release #1.0, Version #1.30
;   CURRENT APPLICATION DATA:
;     APPLICATION NUMBER:  US/09/030,607
;     FILING DATE:  25-FEB-1998
;     CLASSIFICATION:
;   ATTORNEY/AGENT INFORMATION:
;     NAME:  Maki, David J.
;     REGISTRATION NUMBER:  31,392
;     REFERENCE/DOCKET NUMBER:  210121.427C3
;   TELECOMMUNICATION INFORMATION:
;     TELEPHONE:  (206) 622-4900
;     TELEFAX:  (206) 682-6031
;   INFORMATION FOR SEQ ID NO: 44:
;     SEQUENCE CHARACTERISTICS:
;     LENGTH:  852 base pairs
;     TYPE:  nucleic acid
;     STRANDEDNESS:  single
;     TOPOLOGY:  linear
;   MOLECULE TYPE:  cDNA
;   ORIGINAL SOURCE:
;     ORGANISM:  Homo sapiens
US-09-030-607-44

Alignment Scores:
Pred. No.:                      1.06e-48          Length:          852
Score:                          543.00            Matches:         124
Percent Similarity:             54.28%            Conservative:    41
Best Local Similarity:          40.79%            Mismatches:      73
Query Match:                    27.42%            Indels:          66
DB:                                               Gaps:            3

US-08-978-217-16_COPY_2_371 (1-370) x US-09-030-607-44 (1-852)

Qy      69  GlnValLeuGluTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerIle  88
                |||||  ||||  :: .:::.::  ||||:::: ::::  |||||  :::::
Db     850  CAGGTGTTGGGAGTGGCTGGCTCCATCACCTCCTGGACACCAGCTGGATGCCAATTGTATC  791

Qy      89  AspPheSerArgCysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluGluLeu  108
                ||:::.:::.:::.:::::::  ||||  :::::||:::.:::.||::::.:::.
Db     790  CCTTTCCANGAGTTCGACATCAACACGGGCAGCCACCTTTGCAGCATGAGTTTGCAGGAGTTC  731

Qy     109  ArgLeuValPheGlyProLeuGlyAspGlnHisLeuHisAlaGlnLeuArgAspLeuThrSer  128
                ||:  :||||  :||  :: ::|||.:::.::  ::||:::.:::::
Db     730  ACCCGGCGGCGGCAGGACGGCGGGGCANCTCCTCTACAGCAACTTGCAGCATCTGAAGTGG  671

Qy     129  Asn---------SerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGly  145
                |||              :::.:::::::  |||||  :::::::::.:::::
Db     670  AACGGCCAGTGCAGTAGTGAC--------------------------------------  650

Qy     146  MetSerPheGlnSerLeuGlyAspLeuGlyProPheAspGlnGlySerProPheAla  165
                 |||||                       ::||                ||
Db     649  --CTGTTCCAGTCCACACAACAATGTCATTGTCAGAGCTGAACAAACTGAGCCT------  599

Qy     166  GlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrCysSerThrTyrGlyPro  185
                 :::::::::                 ::     ||||  ::    ||||||
Db     598  ---TCCATCATGAACACCTGGAAAGACNAGAACTATTTATATGACACCAACTATGGT--  545

Qy     186  GlyAlaAlaProSerProGlySerSerAspValSerThrAlaArgThrAlaThrProGlnSer  205
                ||||||                    :|||||||
Db     544  ----------------------------AGCACA-------------------------  539

Qy     206  SerHisAlaSerAspSerGlyGlySerAspValAspLeuAspLeuThrGluSerLysVal  225
                                            ::::::||||||||::
Db     538  --------------------------GTAGATTTGTTGGACAGCAAAACT--------  515

Qy     226  PheProArgAspAspPhe----------ThrAspTyrLysGlyGlyGluProLys  240
                |||  ||                   :::
Db     514  TTCTGCCGGGCTCAGATCTCCATGACAACCAGTCACCTTCCTGTTGCAGAGTCACCT  455
```

```
Qy     241  HisGlyLysArgLysArgGlyArgProArgGlyLeuSerLysGluGluTyrTrpAspCysLeu  260
                |||||                      ::: ::  ||||
Db     454  GATATGAAAAAGGAGCAAGACACCCCCTGCCAAGTGCCACCAAA------------  410

Qy     261  GluGlyLysLysLysHisAlaProArgGlyTyrHisLeuTrpGluTrpGlyIleArgAsp  280
                ||||||  :::  ||||::  ||||:  ||||||||||||||
Db     409  -------AAGCACAACCCGAGAGGGACTCACTTATGGGAATTCATCCGCGAC  365

Qy     281  IleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGly  300
                ||  :::::::||||  :::: :: :::||::::::.::||:::||||||||
Db     364  ATCCTTCTTGAACCCAGACAAGAACCCAGGATTAATAAAATGGGAAGACCGATCTGAGGGC  305

Qy     301  ValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlnLysLysLysAsn  320
                |||  ::  ::::::||||  |||||||||||||||||||||||
Db     304  GTCTTCAGTTCTTGAAATCAGAGGCAGCTGGCTCAGCTATGAGATATTACTACAAAAGAGAAATT  245

Qy     321  SerAsnMetThrTyrGlyLeuSerArgAlaMetArgTyrTyrLysArgArgGluIle  340
                ::  ::||  ::::  ::||||||  :||::||:::::::::
Db     244  AGCAGCATGACCTATGAAAAGTCAGCCGAGCTATGAGATATTACTACAAAAGAGAAATT  185

Qy     341  LeuGluArgValAspAspArgArgLeuValTyrLysPheGlyLysAsnSerGlyTrp  360
                ||||||                    ::||||||||||
Db     184  CTGGAGCGTGTGGATGGACGAAGACTGTATATAAATTTGGGAAGAATGCCCGAGGATGG  125

Qy     361  LysGluGluGlu  364
                :: :||||
Db     124  AGAGAAATGAA  113


RESULT 14
US-09-439-313-44/c
;   Sequence 44, Application US/09439313
;   Patent No. 632505
;   GENERAL INFORMATION:
;     APPLICANT:  Xu, Jiangchun
;     APPLICANT:  Dillon, Davin C.
;     APPLICANT:  Mitcham, Jennifer L.
;     APPLICANT:  Harlocker, Susan Louise
;     APPLICANT:  Jiang Yuqui
;     APPLICANT:  Reed, Steven G.
;     APPLICANT:  Kalos, Michael
;     APPLICANT:  Fanger, Gary
;     APPLICANT:  Retter, Mark
;     APPLICANT:  Solk, John
;     APPLICANT:  Day, Craig
;   TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
;   TITLE OF INVENTION: DIAGNOSIS OF PROSTATE CANCER
;   FILE REFERNCE: 210121.427C9
;   CURRENT APPLICATION NUMBER: US/09/439,313
;   CURRENT FILING DATE:  1999-11-12
;   NUMBER OF SEQ ID NOS:  575
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 44
;     LENGTH: 852
;     TYPE: DNA
;     ORGANISM: Homo sapien
;     FEATURE:
;       NAME/KEY: misc_feature
;       LOCATION: (1)...(852)
;     OTHER INFORMATION: n = A,T,C or G
US-09-439-313-44

Alignment Scores:
Pred. No.:                      1.06e-48          Length:          852
Score:                          543.00            Matches:         124
Percent Similarity:             54.28%            Conservative:    41
Best Local Similarity:          40.79%            Mismatches:      73
Query Match:                    27.42%            Indels:          66
DB:                                               Gaps:            7

US-08-978-217-16_COPY_2_371 (1-370) x US-09-439-313-44 (1-852)

Qy      69  GlnValLeuGluTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerIle  88
                |||||  ||||  :: .:::.::  ||||:::: ::::  |||||  :::::
```

```
;   TITLE OF INVENTION:  OF PROSTATE CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE:  210121.427C8
;   CURRENT APPLICATION NUMBER: US/09/352,616A
;   CURRENT FILING DATE:  1999-07-13
;   NUMBER OF SEQ ID NOS:  472
;   SOFTWARE:  FastSEQ for Windows Version 3.0
;   SEQ ID NO 44
;     LENGTH: 852
;     TYPE: DNA
;     ORGANISM: Homo sapien
;   FEATURE:
;     NAME/KEY: misc_feature
;     LOCATION: (1)...(852)
;     OTHER INFORMATION: n = A,T,C or G
US-09-352-616A-44

Alignment Scores:
Pred. No.:                          Length:        852
Score:                1.06e-48      Matches:       124
Percent Similarity:   543.00        Conservative:   41
Best Local Similarity: 54.28%       Mismatches:     73
Query Match:          40.79%        Indels:         66
DB:                   27.42%        Gaps:            7
                        4

US-08-978-217-16_COPY_2_371 (1-370) x US-09-352-616A-44 (1-852)

Qy     69 GlnValLeuGluTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerIle   88
             ||| :::  :::: :::  :::  ::::  |||
Db    850 CAGGTGTGGGAGTGGCTCCATCACCTCCTGGACACCAACCAGCTGGATGCCAATTGTATC  791

Qy     89 AspPheSerArgCysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluGluLeu  108
             |||  ::::::::::||||||||||||||  :::::|||
Db    790 CCTTTCCANGAGTTCGACATCAACGGCGGAGCACCTTTGCAGCATGAGTTTGCAGGAGTTC  731

Qy    109 ArgLeuValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSer  128
             :::|||||||||||||||||| :::::|||||||||
Db    730 ACCCGGCGGCGGAGGGACGGCGGGCANCTCCTCTACAGCAACTTGCAGCATCTGAAGTGG  671

Qy    129 Asn-------SerSerAspGluLeuSerTrpIleIleGluLeuGluLysAspGly  145
             |||          |||||||||||||
Db    670 AACGGGCCAGTGCCAGTAGTGAC-------  650

Qy    146 MetSerPheGlnGluSerLeuGlyAspLeuGlyProPheAspGlnGlySerProPheAla  165
             :::        |||       :::|||
Db    649 ---CTGTTCCAGTCCACACAATGTCATTGTCAAGACTGAACAAACTGAGCCT-------  599

Qy    166 GlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyrCysSerThrTyrGlyPro  185
             |||||||||  :::  :::      |||
Db    598 ---TCCATCATGAACACCTGGAAAGACNAGAACATATTTATGACACCAACTATGGT---  545

Qy    186 GlyAlaProSerProGlySerAspValSerThrAlaArgThrAlaThrProGlnSer  205
             |||
Db    544 --------AGCACA-  539

Qy    206 SerHisAlaSerAspSerGlyGlySerAspValAspLeuThrGluSerLysVal  225
             :::||||||  :::|||
Db    538 -----AAGCACAACCCGAGAGGGACTCACTTATGGGAATTCATCCGCGAC-  515

Qy    226 PheProArgAspPhe----------ThrAspTyrLysLysGlyGluProLys  240
             |||              :::
Db    514 TTCTGCGGGCTCAGATCTCATGAACACCACCAGTCACCTTCCTGTTGCAGAGTCACCT  455

Qy    241 HisGlyLysArgLysSerLysGluSerLysLeuSerLysSerLysLeuSerLysLeuSerLysLeuSerLeu  260
             |||||||||||||
Db    454 GATATGAAAAGGAGCAAGACCCCCCTGCCAAGTGCCACACCAAA----  410

Qy    261 GluGlyGlyLysSerLysSerHisAlaProArgGlyThrHisLeuTrpGluPheGluArgAsp  280
             ::::::::::                    |||
Db    409 --------AGCACAACCCGAGAGGGACTCACTTATGGGAATTCATCCGCGAC  365

Qy    281 IleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGly  300
             |||::::::|||
Db    364 ATCCTCCTTGAACCCGAGACCCAGACCAGGATTAATAAAATGGGAAGAACCGATCTGAGGGC  305
```

RESULT 15
US-09-352-616A-44/c
; Sequence 44, Application US/09352616A
; Patent No. 6395278
; GENERAL INFORMATION:
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Harlocker, Susan Louise
;   APPLICANT: Jiang, Yuqui
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Mitcham, Jennifer Lynn
;   TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS

```
Qy   301 ValPheLysPheArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLysAsn 320
         |||||||||::::|||||||| ||  ||||       ||||  ||
Db   304 GTCTTCAGGTTCTTGAAATCAGAGAGGCAGTGGCTCAGCTATGGGGTAAAAAGAAGAACAAC 245

Qy   321 SerAsnMetThrTyrGluLysSerArgAlaMetArgTyrTyrTyrLysArgGluIle 340
         |||:::||||||||||||||||||| |||||||||  ||  ||||||||||
Db   244 AGCAGCATGACCTATGAAAAGCTCAGCCGAGCTATGAGATATTACTACAAAAGAGAAATT 185

Qy   341 LeuGluArgValAspGlyArgLeuValTyrLysPheGlyLysAsnSerSerGlyTrp 360
         |||||||||||||||||||||||||||||:::  |||||
Db   184 CTGGAGCGTGTGGATGGACGAAGACTGGTATATAAATTTGGGAAGAATGCCCGAGGATGG 125

Qy   361 LysGluGluGlu 364
         :::|||   |||
Db   124 AGAGAAATGAA 113
```

Search completed: February 12, 2004, 21:50:15
Job time : 105.27 secs

```
                    GenCore version 5.1.6
           Copyright (c) 1993 - 2004  Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on:     February 12, 2004, 21:46:16  ; Search time 445.897 Seconds
                                         (without alignments)
                                         7673.534 Million cell updates/sec

Title:        US-08-978-217-15
Perfect score: 7752
Sequence:     1 GGATCCTTCCAAGGCACTGA.........CAGAGGGGTCCTCGATCC 7752

Scoring table: IDENTITY_NUC
               Gapop 10.0 , Gapext 1.0

Searched:     569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters:      1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

Database :    Issued Patents NA:*
           1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
           2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
           3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
           4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
           5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
           6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

      Pred. No. is the number of results predicted by chance to have a
      score greater than or equal to the score of the result being printed,
      and is derived by analysis of the total score distribution.
```

SUMMARIES

Result No.	Score	% Match	Query Length	DB	ID	Description
1	216	2.8	1907	4	US-09-300-958A-27	Sequence 27, Appl
2	216	2.8	1907	4	US-09-570-593-4	Sequence 4, Appli
3	215.6	2.8	1920	4	US-08-746-789A-1	Sequence 1, Appl
4	163.8	2.1	502	4	US-09-389-681-282	Sequence 282, App
5	163.8	2.1	502	4	US-09-620-405B-282	Sequence 282, App
6	163.8	2.1	502	4	US-09-339-338-282	Sequence 282, App
7	163.8	2.1	502	4	US-09-433-826B-282	Sequence 282, App
8	163.8	2.1	502	4	US-09-604-287A-282	Sequence 282, App
9	125.6	1.6	237	4	US-09-016-434-927	Sequence 927, App
10	123.6	1.6	5973	3	US-09-245-041-4	Sequence 4, Appli
11	115.4	1.5	852	3	US-09-020-956-44	Sequence 44, Appl
12	115.4	1.5	852	3	US-09-030-607-44	Sequence 44, Appl
13	115.4	1.5	852	4	US-09-43-313-44	Sequence 44, Appl
14	115.4	1.5	852	4	US-09-352-616A-44	Sequence 44, Appl
15	115.4	1.5	852	4	US-09-232-149A-44	Sequence 44, Appl
16	115.4	1.5	5427	3	US-09-009-913-2	Sequence 2, Appli
17	115.4	1.5	5510	3	US-09-009-913-3	Sequence 3, Appli
18	115.4	1.5	5667	3	US-09-009-913-4	Sequence 4, Appli
19	115.4	1.5	7208	3	US-09-166-186-107	Sequence 107, App
20	115.4	1.5	7208	3	US-09-313-932-107	Sequence 107, App
21	114.8	1.5	2509	4	US-09-319-284-1	Sequence 1, Appli
22	114.4	1.5	14707	4	US-09-312-762A-3	Sequence 3, Appli
23	114.4	1.5	17056	3	US-09-245-041-3	Sequence 3, Appli
24	112	1.4	51259	3	US-08-781-891-209	Sequence 209, App
25	112	1.4	51259	4	US-09-618-166-209	Sequence 209, App
26	110.4	1.4	2411	4	US-09-188-930-75	Sequence 75, Appl
27	110.4	1.4	2411	3	US-09-188-930-256	Sequence 256, App

c 28	110.4	1.4	2411	4	US-09-312-283C-75	Sequence 75, Appl
c 29	110.4	1.4	2411	4	US-09-312-283C-256	Sequence 256, App
30	109	1.4	17056	3	US-09-245-041-3	Sequence 3, Appli
c 31	108.2	1.4	2574	4	US-09-668-313A-10	Sequence 10, Appl
32	108	1.4	30310	4	US-09-657-346A-96	Sequence 96, Appl
33	107.6	1.4	90050	3	US-09-245-041-5	Sequence 5, Appli
34	107.4	1.4	848	3	US-09-009-913-338	Sequence 338, App
c 35	107.4	1.4	90050	3	US-09-245-041-5	Sequence 5, Appli
36	106.6	1.4	48974	3	US-08-920-422-17	Sequence 17, Appl
37	106.4	1.4	5000	4	US-09-302-769-45	Sequence 45, Appl
38	106.4	1.4	6727	3	US-08-629-643A-5	Sequence 5, Appli
c 39	106.4	1.4	6727	3	US-09-280-799-1	Sequence 1, Appli
c 40	106.4	1.4	6727	4	US-09-155-884-5	Sequence 5, Appli
41	106.4	1.4	35828	4	US-09-449-218D-17	Sequence 17, Appl
42	106.4	1.4	35828	4	US-09-668-037A-17	Sequence 17, Appl
43	106.4	1.4	35828	4	US-09-668-037A-17	Sequence 17, Appl
44	106.2	1.4	4550	3	US-09-338-907-182	Sequence 182, App
45	106.2	1.4	4550	4	US-09-218-207-182	Sequence 182, App

ALIGNMENTS

```
RESULT 1
US-09-300-958A-27
; Sequence 27, Application US/09300958A
; Patent No. 6495319
; GENERAL INFORMATION:
;  APPLICANT: McClelland, Michael
;  APPLICANT: Welsh, John
;  APPLICANT: Trenkle, Thomas
;  TITLE OF INVENTION: Reduced Complexity Nucleic Acid Targets and Methods of
;  TITLE OF INVENTION: Using Same
;  FILE REFERENCE: P-PH 3457
;  CURRENT APPLICATION NUMBER: US/09/300,958A
;  CURRENT FILING DATE: 1999-04-27
;  PRIOR APPLICATION NUMBER: 60/083,331
;  PRIOR FILING DATE: 1998-04-27
;  PRIOR APPLICATION NUMBER: 60/098,070
;  PRIOR FILING DATE: 1998-08-27
;  PRIOR APPLICATION NUMBER: 60/118,624
;  PRIOR FILING DATE: 1999-02-04
;  NUMBER OF SEQ ID NOS: 85
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 27
;  LENGTH: 1907
;  TYPE: DNA
;  ORGANISM: Homo sapiens
US-09-300-958A-27

Query Match        2.8%;   Score 216;  DB 4;  Length 1907;
Best Local Similarity  66.7%;  Pred. No. 2.3e-49;
Matches  456;  Conservative  0;  Mismatches  195;  Indels  33;  Gaps  9;

Qy   6999 AGTGTATTACTACAAACGGGAGATCTGGAACGGGTGGATGACGGCTGGTCTCTACAAG 7058
               |||||||||||||||||||||| |||||||||||||||||||||||||||||||
Db   1095 AGTGTACTACTACAAACGGGAGATCTTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAG 1154

Qy   7059 TTTGCAAGAACTCTAGTGGCTGGAAGGAAGAGGTTGGAGAGTCGGAATTAAGGA 7118
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1155 TTTGCAAAAACTCAAGCGGCTGGAAGGAGGAGGAAGAGAGTTCTCCAGAGTCGGAACTGAGGG 1214

Qy   7119 TCGGGGGCTGGACCCAGGACCTGACTCAGTGACATGACATGAACTCAGAGCCTTCCTCGGAA 7178
               ||||||||||||||||||||||||||||  ||||||||||||||||||||||||||||
Db   1215 TTCGGAACTATACCCGGGACCAAACTCACGGACCACTCGAGGCCTGCAAACCTTCCTCGGA 1274

Qy   7179 GGACAGGCAGGGCTGACGGCCCCCTTAAACATGATGGTGTTCCTGTGTTGCTGTAGAGGA 7238
               |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1275 GGACAGGCAGGGCCAGATGG--CCCCTCCACTGGGGAATGCTCCCAGCTGTGCTGTGTGAGGAG 1333

Qy   7239 GAAGAACCTGTTGGGCGTGCCCTCTGC---AGTCTCCTCAAGTGCAGCCCTTTGGCCTC-- 7293
                |||||||||||| |||||||||||||    |||||||||||||||||  |||||||
Db   1334 AAGCTGATGTTTTGGTGTATTGTCAGCGACCCATCGTCCTTGGACTCGGAGACTATGGCCTCGC 1393
```

```
Qy   7179 GGACAGGCAGGCCTGACGGCCCCCTTAAACATGGATGTGTTCCTGTGTTGCTGTAGAGAG 7238
          ||||||||||||||||||||| |||| |||||||||||||||||||||||||||||||||
Db   1275 GGACAGGCAGGCCAGATGG--CCCCTCCACTGGGAATGCGTCCCAGCTGTCGTGTGGAGAG 1333

Qy   7239 GAAGAACCTGTTGGGGTGGGTCCTCGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
          |||||||||   ||||| ||||||||||   ||||||||||||||||||||||| ||||
Db   1334 AAGCTGATGTTTTGGTGTATTGTCAGCCATCAGCCATCGTCCTTGGACTCGGAGACTATGGCCTCGC 1393

Qy   7294 --TCTCCTCGCCCTCTTGGAATTACAAGCCCCGGGTTTGAACCAACTTGT--------- 7341
            |||||||||||||| ||||||||||||||||||||||||| ||||| |
Db   1394 CTCCCCACCCTCCTCTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1453

Qy   7342 --TCGATAACTCTTCCAGCTGTGATTCAGTTCCCGTCCCAACATGGACTGCAAAT 7399
            |||||||| ||||||| ||| |||||||||||||||||||||||||||||||
Db   1454 AGTGTATCTCCTTTATCTGGTGCCTCCTCAAACCCAGTCTCAGACACTTAAATGCAGAC 1513

Qy   7400 GAGAC---CCACCTGCAGATGCCTGCCTCGGACGCTGGGAGGCTGGGAGACTGTGGCGCAGG 7456
          |||||   |||||| |||| |||| |||||||||||||||||||||||||||||||||
Db   1514 AACACCTTCTTCCTGCAGACACTTGGACTGGACTCTGGGAGGAGGCCTCAAGGAGGCCCT----AG 1569

Qy   7457 AGACTGCAGGGACGGAGGAGGGGACTATTTTTCTAAAGCATTTCCCCTCC---CTGGACTGCCTTC 7513
          |||||||||||||||||||||||||||||||| |||||||||||||||   |||||||||||
Db   1570 GGAGCACCGTGATGGAGGAGACAGAGCAGGGACTCCAGACACTCTTCTTCTGGACTGGCGTT 1629

Qy   7514 CACCTCTTTGCTCAGTACTCAGGCTCCACAGACGGGGTCGGATCA-TCCCTAATTTATG 7572
          ||||||||||||||||||||||||||||||||||||||||||||| ||||||||||||||
Db   1630 CACCTCCCTGCTCAGTGCTCTGGGCTCCACGGGCCAGGGGTCAGGGGTCAGAGCACTCCCTAATTTATG 1689

Qy   7573 TGCTATA--AATATTCCAGGTGTATATAGAGAGCTATTTTTCTAAAGCATTCCCCTCC 7630
          |||||||   |||||||||||||||  |||||||| ||| |||||||||||||||||||
Db   1690 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTCTAAAACATTCCCCTCCC 1749

Qy   7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
          |||||||||||||||||||||||
Db   1750 CACTCCCTGCTCAGTGCTTGGGCTCCCACAGAGTGCTGG 1773
```

```
Query Match       2.8%;   Score 216;  DB 4;  Length 1907;
Best Local Similarity 66.7%;   Pred. No. 2.3e-49;
Matches  456;  Conservative   0;  Mismatches 195;  Indels  33;  Gaps    9;

Qy   6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGCCGACGGCTCGTCTACAAG 7058
          |||||||||||||||||||||||| || ||||||||||||||||||||||||
Db   1095 AGGTACTACTACAAACGGGAGATCCTGGAACGGCCGGGTGGCGGGGACTCGTCTACAAG 1154

Qy   7059 TTTGGCAAGAACTCTAGTGGCTGGAAGGAAGAGAGTTGGAGGAGAGTTAAGGA 7118
          |||||||||||  ||||  ||||||||||||||||||||||||||||||||||
Db   1155 TTTGGCAAAAACTCAAGCGCGCTGGAAGAGAAGGAGAGGAAGAGTTCTCCAGAGTCGGAGTCGGAGG 1214

Qy   7119 TCGGGGCTGGACCCAGACCTGACTCAGGCATGAAGCCTTCCTGGAA 7178
          ||  |||||||||||||||||||||||||| ||||||||||||||
Db   1215 TTGGAACTATACCCGGGACCAAACTCACGACCACTCGAGGCCTGCAAACCTTCCTCGGGA 1274
```

```
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 1920
;   TYPE: Nucleic Acid
;   STRANDEDNESS: Single
;   TOPOLOGY: Linear
;   ANTI-SENSE: No
US-08-746-789A-1

Query Match    2.8%;  Score 215.6; DB 1; Length 1920;
Best.Local Similarity 65.6%; Pred. No. 3e-49;
Matches 449; Conservative 0; Mismatches 204; Indels 31; Gaps 8;

Qy  6999 AGGTATTACTACAAACGGAGGAGATCTCGGAACGGGTGGATGGCCGACGGCTCGTCTACAAG 7058
         |||||| ||||||||||||||||||||| ||||||||||||||||||||||||||||||||
Db  1114 AGGTACTACTACAAACGGAGGAGATCTGGAACGGGTGGATGGCCGACGGCTCGTCTACAAG 1173

Qy  7059 TTTGGCAAGAACTCTAGTGGCTGGAAGGAGGAAGGAGAGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
Db  1174 TTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGGAGAGAGGGTTCTCCAGAGTCGGAACTGAGGG 1233

Qy  7119 TCGGGGCTGGAACCAGAACCTGACTCAGGCATGAACTGAAGCCTTCTGGAA 7178
Db  1234 TTGGAACTATACCCGGGACCAAACCTCACGGACCACTCACGGCCTGCAAACCTTCCTGGGA 1293

Qy  7179 GGACAGGCAGGCCTGACGGCCCCCTTAACATGGATGGTGTTCCCTGTGTTGCTGTAGAGAG 7238
Db  1294 GGACAGGCAGGCCAGATGG-CCCCTCCACTGGGGAATGCTTCCCAGCTGTGCTGTGGGAGAG 1352

Qy  7239 GAAGAACCTGTTGGGGGTGCCCTCTGC--AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
Db  1353 AAGCTGATGTGTTTGGTGTATTGTCAGCCATCGTCCTGGGACTCGGAGACTATGGCCTCGC 1412

Qy  7294 --TCTCCTCGCCCTCTTGGAATTACAAGCCCGGGGTTTGAACCAACTTGTTCGA------ 7345
Db  1413 CTCCCCACCCCCTCTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTATAGCTGCA 1472

Qy  7346 --------TAACTCTTCCAGCTGTGATTCCAGTTCCCTCCCGTCCCAACATGACCTGCAA 7397
Db  1473 AGTGTATCTCCTTTATCTGGTGCCTCTCCTCAAACCCAGTCAGACACTAAATGCGAGACA 1532

Qy  7398 ATGAGAGACCCACCTGCAGATGCCTGGCCTCAGCCAAGGAGGCTGGGAGACTGTGGCAGGA 7457
Db  1533 ACACCTTCCTCCTGCAGACACCTGGACCTGAGCCCAAGGAGGCCCTGGG--GAGGGGCCTAGGG 1590

Qy  7458 GACTGCAGGGACGGGAGGGGACCAGGGTTGTGTTCCTCGG----TACTTCCTGGACTGCCTTC 7513
Db  1591 GAGCCACCGTGATGAGGAGGACGAGGAGGGGCCTCCAGCACCTTCTTCTTCTGGACTGGCGTT 1650

Qy  7514 CACCTCTTTGCTCAGTACTCAGGCTCCACAGCGGGGGTCCGATCA-TCCCTAATTTATG 7572
Db  1651 CACCTCCCGTCGTCCCAGTGCTTGGGCGTCCACGGGCAGGGGTCCACGGGCACTCCCTAATTTATG 1710

Qy  7573 TGC--TATAAAATATTCCAGGTGTATATAGAGCATTTTTCTTAAAGCATTTCCCCTCC 7630
Db  1711 TGCTATATAAATATGTCAGATGTACATAGAGCATCTATTTTTTCTAAAAACATTCCCCTCCC 1770

Qy  7631 CTGCTCTTCCTCCACTGAGTGCTGG 7654
Db  1771 CACTCCTCTCCCACAGAGTGCTGG 1794

RESULT 4
US-09-389-681-282
; Sequence 282, Application US/09389681A
; Patent No. 6518237
; GENERAL INFORMATION:
;   APPLICANT: Yuqui, Jiang
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.470C3
; CURRENT APPLICATION NUMBER: US/09/389,681A
; CURRENT FILING DATE: 1999-09-02
; NUMBER OF SEQ ID NOS: 463
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-389-681-282

Query Match    88.9%;  Score 163.8; DB 4; Length 502;
Best.Local Similarity 2.1%; Pred. No. 2.9e-35;
Matches 177; Conservative 0; Mismatches 22; Indels 0; Gaps 0;

Qy  6256 GCCCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTAATCCACCCGAGCTC 6315
Db   258 GCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGAGCTC 317

Qy  6316 AACGAAGGCCTCATGAGTGGGAGAACCGGACAGAGGGTGTGTTCAAGTTTCTTCGCTCA 6375
Db   318 AACGAGGGCCTCATGAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCCTTGCGCTCC 377

Qy  6376 GAGGCCGTGGCCCAACTCTGGGCCCAGAAGAGAGAACAGCAACAACATGACCTATGAGAAG 6435
Db   378 GAGGCTGTGGCCCAACTATGGGCCCAAAAGAACACAGCAACATGACCTACGAGAAG 437

Qy  6436 CTGAGCCGAGCCATGAGGT 6454
Db   438 CTGAGCCCGGGCCATGAGGT 456

RESULT 5
US-09-620-405B-282
; Sequence 282, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
;   APPLICANT: Jiang, Yuqiu
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Harlocker, Susan L.
;   APPLICANT: Hepler, William T.
;   TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
;   FILE REFERENCE: 210121.470C8
; CURRENT APPLICATION NUMBER: US/09/620,405B
; CURRENT FILING DATE: 2000-07-20
; NUMBER OF SEQ ID NOS: 495
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-620-405B-282

Query Match    88.9%;  Score 163.8; DB 4; Length 502;
Best.Local Similarity 2.1%; Pred. No. 2.9e-35;
Matches 177; Conservative 0; Mismatches 22; Indels 0; Gaps 0;

Qy  6256 GCCCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTAATCCACCCGAGCTC 6315
Db   258 GCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGAGCTC 317

Qy  6316 AACGAAGGCCTCATGAGTGGGAGAACCGGACAGAGGGTGTGTTCAAGTTTCTTCGCTCA 6375
Db   318 AACGAGGGCCTCATGAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCCTTGCGCTCC 377

Qy  6376 GAGGCCGTGGCCCAACTCTGGGCCCAGAAGAGAGAACAGCAACAACATGACCTATGAGAAG 6435
Db   378 GAGGCTGTGGCCCAACTATGGGCCCAAAAGAACACAGCAACATGACCTACGAGAAG 437

Qy  6436 CTGAGCCGAGCCATGAGGT 6454
```

Db   438 CTGAGCCGGCCATGAGGT 456

RESULT 6
US-09-339-338-282
; Sequence 282, Application US/09339338A
; Patent No. 6573368
; GENERAL INFORMATION:
;   APPLICANT: Yuqiu, Jiang
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.470C2
;   CURRENT APPLICATION NUMBER: US/09/339,338A
;   CURRENT FILING DATE: 1999-06-23
;   NUMBER OF SEQ ID NOS: 315
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-339-338-282

Query Match   2.1%;   Score 163.8; DB 4; Length 502;
Best Local Similarity 88.9%;   Pred. No. 2.9e-35;
Matches 177; Conservative   0; Mismatches 22; Indels   0; Gaps   0;

Qy   6256 GCCCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTAATCCACCCCGAGCTC 6315
          ||||||||||||||| |||||||||||||||||||||||||||| ||||||||||||||
Db   258 GGGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTC 317

Qy   6316 AACGAAGGCCTCATGAAGTGGGAGAACCGGCACGAGGGTGTGTTCAAGTTTCTTCGCTCA 6375
          ||||| |||||||||||||||||||||||||||||| ||||||| ||||||||||||||
Db   318 AACGAGGGCCTCATGAAGTGGGAGAATCGGCGTCTTCAAGTTCCTGCGCTCC 377

Qy   6376 GAGGCCGTGCCCAACTCTGGGCCAGAGAAGAAGAACAGCAACAATGACCTATGAGAAG 6435
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   378 GAGGCTGTGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAACAATGACCTACGAGAAG 437

Qy   6436 CTGAGCCGAGCCATGAGGT 6454
          |||||||| |||||||||
Db   438 CTGAGCCGGCCATGAGGT 456

RESULT 7
US-09-433-826B-282
; Sequence 282, Application US/09433826B
; Patent No. 6579973
; GENERAL INFORMATION:
;   APPLICANT: Jiang, Yuqui
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Harlocker, Susan L.
;   TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.470C4
;   CURRENT APPLICATION NUMBER: US/09/433,826B
;   CURRENT FILING DATE: 1999-11-03
;   NUMBER OF SEQ ID NOS: 474
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-433-826B-282

Query Match   2.1%;   Score 163.8; DB 4; Length 502;
Best Local Similarity 88.9%;   Pred. No. 2.9e-35;
Matches 177; Conservative   0; Mismatches 22; Indels   0; Gaps   0;

Qy   6256 GCCCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTAATCCACCCCGAGCTC 6315
          ||||||||||||||| |||||||||||||||||||||||||||| ||||||||||||||
Db   258 GGGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTC 317

Qy   6316 AACGAAGGCCTCATGAAGTGGGAGAACCGGCACGAGGGTGTGTTCAAGTTTCTTCGCTCA 6375
          ||||| |||||||||||||||||||||||||||||| ||||||| ||||||||||||||
Db   318 AACGAGGGCCTCATGAAGTGGGAGAATCGGCGTCTTCAAGTTCCTGCGCTCC 377

Qy   6376 GAGGCCGTGCCCAACTCTGGGCCAGAGAAGAAGAACAGCAACAATGACCTATGAGAAG 6435
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   378 GAGGCTGTGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAACAATGACCTACGAGAAG 437

Qy   6436 CTGAGCCGAGCCATGAGGT 6454
          |||||||| |||||||||
Db   438 CTGAGCCGGCCATGAGGT 456

RESULT 8
US-09-604-287A-282
; Sequence 282, Application US/09604287A
; Patent No. 6586572
; GENERAL INFORMATION:
;   APPLICANT: Jiang, Yuqiu
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Harlocker, Susan L.
;   APPLICANT: Hepler, William T.
;   TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
;   FILE REFERENCE: 210121.470C7
;   CURRENT APPLICATION NUMBER: US/09/604,287A
;   CURRENT FILING DATE: 2000-06-22
;   NUMBER OF SEQ ID NOS: 489
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-604-287A-282

Query Match   2.1%;   Score 163.8; DB 4; Length 502;
Best Local Similarity 88.9%;   Pred. No. 2.9e-35;
Matches 177; Conservative   0; Mismatches 22; Indels   0; Gaps   0;

Qy   6256 GCCCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTAATCCACCCCGAGCTC 6315
          ||||||||||||||| |||||||||||||||||||||||||||| ||||||||||||||
Db   258 GGGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTC 317

Qy   6316 AACGAAGGCCTCATGAAGTGGGAGAACCGGCACGAGGGTGTGTTCAAGTTTCTTCGCTCA 6375
          ||||| |||||||||||||||||||||||||||||| ||||||| ||||||||||||||
Db   318 AACGAGGGCCTCATGAAGTGGGAGAATCGGCGTCTTCAAGTTCCTGCGCTCC 377

Qy   6376 GAGGCCGTGCCCAACTCTGGGCCAGAGAAGAAGAACAGCAACAATGACCTATGAGAAG 6435
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   378 GAGGCTGTGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAACAATGACCTACGAGAAG 437

Qy   6436 CTGAGCCGAGCCATGAGGT 6454
          |||||||| |||||||||
Db   438 CTGAGCCGGCCATGAGGT 456

RESULT 9
US-09-016-434-927
; Sequence 927, Application US/09016434
; Patent No. 6500938
; GENERAL INFORMATION:
;   APPLICANT: Janice Au-Young
;   APPLICANT: Jeffrey J. Seilhamer
;   TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF SIGNALING
;   TITLE OF INVENTION: PATHWAY GENE EXPRESSION
;   NUMBER OF SEQUENCES: 1490
;   CORRESPONDENCE ADDRESS:
;

```
;       ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
;       STREET: 3174 PORTER DRIVE
;       CITY: PALO ALTO
;       STATE: CALIFORNIA
;       COUNTRY: USA
;       ZIP: 94304
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE: Floppy disk
;       COMPUTER: IBM PC compatible
;       OPERATING SYSTEM: PC-DOS/MS-DOS
;       SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER: US/09/016,434
;       FILING DATE: HEREWITH
;       CLASSIFICATION:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:
;       FILING DATE:
;       CLASSIFICATION:
;     ATTORNEY/AGENT INFORMATION:
;       NAME: Zeller, Karen J
;       REGISTRATION NUMBER: 37,071
;       REFERENCE/DOCKET NUMBER: PA-0002 US
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE: (650) 855-0555
;       TELEFAX: (650) 845-4166
;   INFORMATION FOR SEQ ID NO: 927:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH: 237 base pairs
;       TYPE: nucleic acid
;       STRANDEDNESS: single
;       TOPOLOGY: linear
;     IMMEDIATE SOURCE:
;       LIBRARY: COLNCRT01
;       CLONE: 773734
US-09-016-434-927

Query Match          1.6%;    Score 125.6; DB 4;  Length 237;
Best Local Similarity   79.3%;  Pred. No. 6.9e-25;
Matches  149;  Conservative   0;  Mismatches  39;  Indels  0;  Gaps  0;

Qy  6999 AGGTATTACTACAAACGGAGAGATCTGGAAGCGGGTGGATGGCCGACGGCTCGTCTACAAG 7058
         |||||| |||||||||||||||||| ||||||| |||||||| ||||| |||||||||||
Db    50 AGGTACTACTACAAACGGAGAGATCTCGGAACGGGGTGGATCGCCGGCGACTCGTCTACAAG 109

Qy  7059 TTTGGCAAGAACTCTAGTGCTGGAAGGAAGAAGAGGTTCGGAGAGAGTCGGAATTAAGGA 7118
         |||||||||| |||||  |||||||||||||||||||||||||  |||||
Db   110 TTTGGCAAAAACTCAAGCGGCTGGAGGAGGAGGAGGAGGTTCTCCAGAGTCGGACTGAGGG 169

Qy  7119 TCGGGGCTGGACCCAGGACCTGACTCAGGCATGAACTCCAGAACTGAAGCCTTCCTGGAA 7178
         |||||||  ||||||     |||||||| |||      |||||||| |||||
Db   170 TTGGAACTATACCCGGGACCCAAACTCACGGACCACTCGAGGCCTGCAAACCTTCCTGGGA 229

Qy  7179 GGACAGGC 7186
         ||||||||
Db   230 GGACAGGC 237

RESULT 10
US-09-245-041-4
; Sequence 4, Application US/09245041
; Patent No. 6274339
; GENERAL INFORMATION:
;   APPLICANT: Moore, K.
;   APPLICANT: Nagle, D.
;   TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR THE DIAGNOSIS AND TREATMENT
;   TITLE OF INVENTION: OF BODY WEIGHT DISORDERS INCLUDING OBESITY
;   FILE REFERENCE: 7853-136
;   CURRENT APPLICATION NUMBER: US/09/245,041
;   CURRENT FILING DATE: 1999-02-05
;   EARLIER APPLICATION NUMBER: 60/093,630
;   EARLIER FILING DATE: 1998-07-21
;   EARLIER APPLICATION NUMBER: 60/104,978
```

```
;   EARLIER FILING DATE: 1998-10-20
;   NUMBER OF SEQ ID NOS: 131
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 4
;   LENGTH: 5973
;   TYPE: DNA
;   ORGANISM: Mus musculus
US-09-245-041-4

Query Match          1.6%;    Score 123.6; DB 3;  Length 5973;
Best Local Similarity   67.4%;  Pred. No. 2e-23;
Matches  174;  Conservative   0;  Mismatches  84;  Indels  0;  Gaps  0;

Qy  1841 TTTGTTCTGTAGTTTAGTTTTTCAAGACAGAGTTCTCGTGTAGCCCTGGCGTGTCCTG 1900
         |||| || |||| ||| ||||||||||||| |||||| ||||| ||||||||| |||||
Db  5390 TTCTTTTTTCATTTTCGGTTTTTTCAAGACAGGGTTTCTCTGTATAGCCCTGGCTGTCCTG 5449

Qy  1901 GAACTCACTCTGTAGACAAGGCTGGCCTCGAACTCAGAAATCCTTCACCTCTACTTCAG 1960
         |||||||||||||||| ||||||||||||||||||||||||| ||| ||| ||| ||
Db  5450 GAACTCACTCTGTAGACCAGGCTGGCCTCGAACTCAGAAATCGCCTGCCTCTGCCTCCC 5509

Qy  1961 GAGTGCTGGGATTAAAGATGTGCGCTGCCTCCTCCACCCCAATTTGTTTTGTTTTTTTA 2020
         ||||| |||||||||| ||||| |||| |||| |||||||  |||||||  ||||| |||
Db  5510 AAATGCTGGGATTAAAGGTGTGCCACCACCCAGCCTAAAAGATTTCTTACTAAA 5569

Qy  2021 AGGGCCCGTAAACAGTAAAATTAACATGTGCATCCTGTTGTCTTGTGTAATGACTCAAA 2080
         ||||||| || |||||||| ||||| || ||| ||||| |||| ||| ||||||||||
Db  5570 ATATATTTCTAAATTAATTAGTTGGAATCTGGTTCATACTCTTTTTTGAAACAAAACCAG 5629

Qy  2081 TGTTGGGCTTCTGACCAC 2098
         ||||||| |||||
Db  5630 CATTTTTTTTCATTCTAC 5647

RESULT 11
US-09-020-956-44/c
; Sequence 44, Application US/09020956
; Patent No. 6261562
; GENERAL INFORMATION:
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Dillin, Davin C.
;   TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY OF PROSTATE CANCER AND METHODS FO
;   NUMBER OF SEQUENCES: 178
;   CORRESPONDENCE ADDRESS:
;     ADDRESSEE: SEED and BERRY LLP
;     STREET: 6300 Columbia Center, 701 Fifth Avenue
;     CITY: Seattle
;     STATE: WA
;     COUNTRY: USA
;     ZIP: 98104
;   COMPUTER READABLE FORM:
;     MEDIUM TYPE: Floppy disk
;     COMPUTER: IBM PC compatible
;     OPERATING SYSTEM: PC-DOS/MS-DOS
;     SOFTWARE: PatentIn Release #1.0, Version #1.30
;   CURRENT APPLICATION DATA:
;     APPLICATION NUMBER: US/09/020,956
;     FILING DATE: 09-FEB-1998
;     CLASSIFICATION:
;   ATTORNEY/AGENT INFORMATION:
;     NAME: Maki, David J.
;     REGISTRATION NUMBER: 31,392
;     REFERENCE/DOCKET NUMBER: 210121.427C2
;   TELECOMMUNICATION INFORMATION:
;     TELEPHONE: (206) 622-4900
;     TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 44:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 852 base pairs
;     TYPE: nucleic acid
;     STRANDEDNESS: single
;     TOPOLOGY: linear
;     MOLECULE TYPE: cDNA
```

;   ORIGINAL SOURCE:
;   ORGANISM: Homo sapiens
US-09-020-956-44

Query Match   1.5%;   Score 115.4; DB 3; Length 852;
Best Local Similarity 74.1%; Pred. No. 1.1e-21;
Matches 146; Conservative 0; Mismatches 51; Indels 0; Gaps 0;

Qy   6258 CCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTAATCCACCCCGAGCTCAA 6317
          ||||||||||||||||||||||||||||||||||||| |||||||||||||||||||||
Db   401 CCCGAGAGGGGACTCACTTATGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAA 342

Qy   6318 CGAAGGCCTCATGAAGTGGGAGAACCGGCACGAGGGTGTGTTCAAGTTTCTTCGCTCAGA 6377
          |||||||||||| |||||||||||||||||||||||||| |||||||||||||||||||
Db   341 CCCGGATTAATAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGA 282

Qy   6378 GGCCGTGGCCCAACTCTGGGCGTCTGAGGAAGAACAGCAACAGCAGCCATGACCTATGAGAAGCT 6437
          ||||||||||| |||||||||| |||||||||||||||||||||||||||||||||||||
Db   281 GGCAGTGGCTCAGCTATGCAGTATGGGTAAAAGAAGAACATGACCATGAGAAAGCT 205

Qy   6438 GAGCCGAGCCATGAGGT 6454
          |||||||||||||
Db   221 CAGCCGAGCTATGAGAT 205

RESULT 12
US-09-030-607-44/c
; Sequence 44, Application US/09030607
; Patent No. 626245
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillon, Davin C.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY OF PROSTATE CANCER AND METHODS FO
; NUMBER OF SEQUENCES: 224
; CORRESPONDENCE ADDRES:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: WA
; COUNTRY: USA
; ZIP: 98104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/030,607
; FILING DATE: 25-FEB-1998
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Maki, David J.
; REGISTRATION NUMBER: 31,392
; REFERENCE/DOCKET NUMBER: 210121.427C3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 44:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 852 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; ORIGINAL SOURCE:
; ORGANISM: Homo sapiens
US-09-030-607-44

Query Match   1.5%;   Score 115.4; DB 3; Length 852;
Best Local Similarity 74.1%; Pred. No. 1.1e-21;
Matches 146; Conservative 0; Mismatches 51; Indels 0; Gaps 0;

Qy   6258 CCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTAATCCACCCCGAGCTCAA 6317

Db   401 CCCGAGAGGGGACTCACTTATGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAA 342

Qy   6318 CGAAGGCCTCATGAAGTGGGAGAACCGGCACGAGGGTGTGTTCAAGTTTCTTCGCTCAGA 6377
          |||||||||||| |||||||||||||||||||||||||| |||||||||||||||||||
Db   341 CCCGGATTAATAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGA 282

Qy   6378 GGCCGTGGCCCAACTCTGGGCGTCTGAGGAAGAACAGCAACAGCAGCCATGACCTATGAGAAGCT 6437
          ||||||||||| |||||||||| |||||||||||||||||||||||||||||||||||||
Db   281 GGCAGTGGCTCAGCTATGCAGTATGGGTAAAAGAAGAACATGACCATGAGAAAGCT 205

Qy   6438 GAGCCGAGCCATGAGGT 6454
          |||||||||||||
Db   221 CAGCCGAGCTATGAGAT 205

RESULT 13
US-09-439-313-44/c
; Sequence 44, Application US/09439313
; Patent No. 6329505
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Harlocker, Susan Louise
; APPLICANT: Jiang Yuqui
; APPLICANT: Reed, Steven G.
; APPLICANT: Kalos, Michael
; APPLICANT: Fanger, Gary
; APPLICANT: Retter, Mark
; APPLICANT: Solk, John
; APPLICANT: Day, Craig
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF PROSTATE CANCER
; FILE REFERENCE: 210121.427C9
; CURRENT APPLICATION NUMBER: US/09/439,313
; CURRENT FILING DATE: 1999-11-12
; NUMBER OF SEQ ID NOS: 575
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 44
; LENGTH: 852
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(852)
; OTHER INFORMATION: n = A,T,C or G
US-09-439-313-44

Query Match   1.5%;   Score 115.4; DB 4; Length 852;
Best Local Similarity 74.1%; Pred. No. 1.1e-21;
Matches 146; Conservative 0; Mismatches 51; Indels 0; Gaps 0;

Qy   6258 CCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTAATCCACCCCGAGCTCAA 6317
          ||||||||||||||||||||||||||||||||||||| |||||||||||||||||||||
Db   401 CCCGAGAGGGGACTCACTTATGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAA 342

Qy   6318 CGAAGGCCTCATGAAGTGGGAGAACCGGCACGAGGGTGTGTTCAAGTTTCTTCGCTCAGA 6377
          |||||||||||| |||||||||||||||||||||||||| |||||||||||||||||||
Db   341 CCCGGATTAATAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGA 282

Qy   6378 GGCCGTGGCCCAACTCTGGGCGTCTGAGGAAGAACAGCAACAGCAGCCATGACCTATGAGAAGCT 6437
          ||||||||||| |||||||||| |||||||||||||||||||||||||||||||||||||
Db   281 GGCAGTGGCTCAGCTATGCAGTATGGGTAAAAGAAGAACAACAGCAGCCATGACCTATGAGAAAGCT 205

Qy   6438 GAGCCGAGCCATGAGGT 6454
          |||||||||||||
Db   221 CAGCCGAGCTATGAGAT 205

RESULT 14
US-09-352-616A-44/c
; Sequence 44, Application US/09352616A

; Patent No. 6395278
; GENERAL INFORMATION:
; APPLICANT: Dillon, Davin C.
; APPLICANT: Harlocker, Susan Louise
; APPLICANT: Jiang, Yuqui
; APPLICANT: Xu, Jiangchun
; APPLICANT: Mitcham, Jennifer Lynn
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF PROSTATE CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.427C8
; CURRENT APPLICATION NUMBER: US/09/352,616A
; CURRENT FILING DATE: 1999-07-13
; NUMBER OF SEQ ID NOS: 472
; SOFTWARE: PatentIn for Windows Version 3.0
; SEQ ID NO 44
; LENGTH: 852
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(852)
; OTHER INFORMATION: n = A,T,C or G
US-09-352-616A-44

Query Match   1.5%; Score 115.4; DB 4; Length 852;
Best Local Similarity 74.1%; Pred. No. 1.1e-21;
Matches 146; Conservative 0; Mismatches 51; Indels 0; Gaps 0;

Qy 6258 CCCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTAATCCACCCGAGCTCAA 6317
              |||||| ||| ||||| ||| ||||| || ||||||
Db   401 CCCGAGAGGGACTCACTTATGGGAATTCATCCGGACATCCTCTTGAACCCAGACAAGAA 342

Qy 6318 CGAAGGCCTCATGAAGTGGGAGAACCGGCACGAGGGTGTGTTCAAGTTTCTTCGCTCAGA 6377
              |||||||| ||| ||||||| |||| ||| || || |||| || |||||
Db   341 CCCAGGATTAATAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGA 282

Qy 6378 GGCCGTGGCCCAACTCTGGGCCCAGAAGAAGAAGAACAGCAACATGACCTATGAGAAGCT 6437
              ||||||| || ||||||||||||||||| |||||||||||||||||||||
Db   281 GGCAGTGGCTCAGCTATGGGGTAAAAAGAAGAACACAGCAGCATGACCTATGAAAAGCT 222

Qy 6438 GAGCCGAGCCATGAGGT 6454
              ||||||||| ||||
Db   221 CAGCCGAGCTATGAGAT 205

Search completed: February 13, 2004, 01:55:04
Job time : 448.897 secs

RESULT 15
US-09-232-149A-44/c
; Sequence 44, Application US/09232149A
; Patent No. 6465611
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer Lynn
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY OF PROSTATE
; TITLE OF INVENTION: CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.427C6
; CURRENT APPLICATION NUMBER: US/09/232,149A
; CURRENT FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 338
; SOFTWARE: PatentIn for Windows Version 3.0
; SEQ ID NO 44
; LENGTH: 852
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(852)
; OTHER INFORMATION: n = A,T,C or G
US-09-232-149A-44

Query Match   1.5%; Score 115.4; DB 4; Length 852;
Best Local Similarity 74.1%; Pred. No. 1.1e-21;
Matches 146; Conservative 0; Mismatches 51; Indels 0; Gaps 0;

```
              GenCore version 5.1.6

       Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on:    February 12, 2004, 21:46:16 ; Search time 1.20792 Seconds
                                          (without alignments)
                                          7673.534 Million cell updates/sec

Title:          US-08-978-217-14
Perfect score:  21
Sequence:       1 GTACCTCATGGCCCGGCTCAG 21

Scoring table:  IDENTITY_NUC
                Gapop 10.0 , Gapext 1.0

Searched:       569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters:    1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

Database :   Issued_Patents_NA:*
             1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
             2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
             3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
             4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
             5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
             6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
```

SUMMARIES

Result No.		Score	% Query Match	Match Length	DB	ID	Description
c	1	21	100.0	21	237	4	US-09-016-434-927	Sequence 927, App
c	2	21	100.0	21	502	4	US-09-389-681-282	Sequence 282, App
c	3	21	100.0	21	502	4	US-09-620-405B-282	Sequence 282, App
c	4	21	100.0	21	502	4	US-09-339-338-282	Sequence 282, App
c	5	21	100.0	21	502	4	US-09-433-826B-282	Sequence 282, App
c	6	21	100.0	21	502	4	US-09-604-287A-282	Sequence 282, App
c	7	21	100.0	21	1907	4	US-09-300-958A-27	Sequence 27, Appl
c	8	21	100.0	21	1907	4	US-09-570-593-4	Sequence 4, Appli
c	9	21	100.0	21	1920	1	US-09-746-789A-1	Sequence 1, Appli
c	10	16.4	78.1	21	5499	3	US-08-479-722B-1	Sequence 1, Appli
c	11	16.4	78.1	21	5502	5	PCT-US95-02251-17	Sequence 17, Appl
c	12	16.2	77.1	21	2266	2	US-09-213-767-1	Sequence 1, Appli
c	13	16.2	77.1	21	4403765	3	US-09-103-840A-2	Sequence 2, Appli
c	14	16.2	77.1	21	4403765	3	US-09-103-840A-2	Sequence 2, Appli
c	15	16.2	77.1	21	4411529	3	US-09-103-840A-1	Sequence 1, Appli
c	16	16.2	77.1	21	4411529	3	US-09-103-840A-1	Sequence 1, Appli
c	17	15.8	75.2	21	671	3	US-09-129-030-29	Sequence 29, Appl
c	18	15.8	75.2	21	1479	4	US-08-868-373-3	Sequence 3, Appli
c	19	15.8	75.2	21	1533	4	US-09-522-217-88	Sequence 88, Appl
c	20	15.8	75.2	21	2224	4	US-09-221-017B-384	Sequence 384, App
c	21	15.8	75.2	21	2877	4	US-09-619-353-1	Sequence 1, Appli
c	22	15.8	75.2	21	3072	4	US-09-522-217-55	Sequence 55, Appl
c	23	15.4	73.3	21	1935	4	US-09-495-050A-190	Sequence 190, App
c	24	15.2	72.4	21	848	3	US-09-009-913-138	Sequence 138, App
c	25	15.2	72.4	21	856	4	US-09-535-008-55	Sequence 55, Appl
c	26	15.2	72.4	21	2218	4	US-09-350-457A-1	Sequence 1, Appli
c	27	15.2	72.4	21	2385	3	US-08-352-902D-145	Sequence 145, App
c	28	15.2	72.4		2484	2	US-08-209-521-8	Sequence 8, Appli
c	29	15.2	72.4		2484	3	US-08-961-810-4	Sequence 4, Appli
c	30	15.2	72.4		2484	3	US-08-352-902D-4	Sequence 4, Appli
c	31	15.2	72.4		2484	4	US-09-265-503B-4	Sequence 4, Appli
c	32	15.2	72.4		2484	4	US-09-708-200-16	Sequence 16, Appl
c	33	15.2	72.4		2525	4	US-08-294-312B-1	Sequence 1, Appli
c	34	15.2	72.4		2525	4	US-08-468-024B-1	Sequence 1, Appli
c	35	15.2	72.4		2667	2	US-08-187-757D-1	Sequence 1, Appli
c	36	15.2	72.4		2667	3	US-08-469-412A-1	Sequence 1, Appli
c	37	15.2	72.4		2667	3	US-09-021-715-1	Sequence 1, Appli
c	38	15.2	72.4		4953	4	US-09-620-312D-240	Sequence 240, App
c	39	15	71.4		827	4	US-09-333-599-5	Sequence 5, Appli
c	40	15	71.4		827	4	US-09-499-781-5	Sequence 5, Appli
c	41	15	71.4		870	3	US-09-333-599-1	Sequence 1, Appli
c	42	15	71.4		870	4	US-09-499-781-1	Sequence 1, Appli
c	43	14.8	70.5		778	3	US-09-998-416-220	Sequence 220, App
c	44	14.8	70.5		1021	3	US-09-095-117-5	Sequence 5, Appli
c	45	14.8	70.5		1030	3	US-09-095-117-7	Sequence 7, Appli

ALIGNMENTS

```
RESULT 1
US-09-016-434-927/c
; Sequence 927, Application US/09016434
; Patent No. 6500938
; GENERAL INFORMATION:
;   APPLICANT: Janice Au-Young
;   APPLICANT: Jeffrey J. Seilhamer
;   TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF SIGNALING
;   TITLE OF INVENTION: PATHWAY GENE EXPRESSION
;   NUMBER OF SEQUENCES: 1490
;   CORRESPONDENCE ADDRESS:
;     ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
;     STREET: 3174 PORTER DRIVE
;     CITY: PALO ALTO
;     STATE: CALIFORNIA
;     COUNTRY: USA
;     ZIP: 94304
;   COMPUTER READABLE FORM:
;     MEDIUM TYPE: Floppy disk
;     COMPUTER: IBM PC compatible
;     OPERATING SYSTEM: PC-DOS/MS-DOS
;     SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
;   CURRENT APPLICATION DATA:
;     APPLICATION NUMBER: US/09/016,434
;     FILING DATE: HEREWITH
;     CLASSIFICATION:
;   PRIOR APPLICATION DATA:
;     APPLICATION NUMBER:
;     FILING DATE:
;     CLASSIFICATION:
;   ATTORNEY/AGENT INFORMATION:
;     NAME: Zeller, Karen J.
;     REGISTRATION NUMBER: 37,071
;     REFERENCE/DOCKET NUMBER: PA-0002 US
;   TELECOMMUNICATION INFORMATION:
;     TELEPHONE: (650) 855-0555
;     TELEFAX: (650) 845-4166
; INFORMATION FOR SEQ ID NO: 927:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 237 base pairs
;     TYPE: nucleic acid
;     STRANDEDNESS: single
;     TOPOLOGY: linear
;   IMMEDIATE SOURCE:
;     LIBRARY: COLNCRT01
;     CLONE: 773734
US-09-016-434-927

  Query Match             100.0%;  Score 21;  DB 4;  Length 237;
  Best Local Similarity   100.0%;  Pred. No. 0.3;
```

```
Matches    21;   Conservative    0;   Mismatches    0;   Indels    0;   Gaps    0;

Qy     1  GTACCTCATGGCCCGGCTCAG  21
          |||||||||||||||||||||
Db    55  GTACCTCATGGCCCGGCTCAG  35

RESULT 2
US-09-389-681-282/c
; Sequence 282, Application US/09389681A
; Patent No. 6518237
; GENERAL INFORMATION:
; APPLICANT: Yuqui, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C3
; CURRENT FILING DATE: 1999-09-02
; NUMBER OF SEQ ID NOS: 463
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-389-681-282

Query Match           100.0%;   Score 21;   DB 4;   Length 502;
Best Local Similarity 100.0%;   Pred. No. 0.31;
Matches    21;   Conservative    0;   Mismatches    0;   Indels    0;   Gaps    0;

Qy     1  GTACCTCATGGCCCGGCTCAG  21
          |||||||||||||||||||||
Db   458  GTACCTCATGGCCCGGCTCAG  438

RESULT 3
US-09-620-405B-282/c
; Sequence 282, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
; FILE REFERENCE: 210121.470C8
; CURRENT APPLICATION NUMBER: US/09/620,405B
; CURRENT FILING DATE: 2000-07-20
; NUMBER OF SEQ ID NOS: 495
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-620-405B-282

Query Match           100.0%;   Score 21;   DB 4;   Length 502;
Best Local Similarity 100.0%;   Pred. No. 0.31;
Matches    21;   Conservative    0;   Mismatches    0;   Indels    0;   Gaps    0;

Qy     1  GTACCTCATGGCCCGGCTCAG  21
          |||||||||||||||||||||
Db   458  GTACCTCATGGCCCGGCTCAG  438

RESULT 4
US-09-339-338-282/c
; Sequence 282, Application US/09339338A
; Patent No. 6573368
; GENERAL INFORMATION:
; APPLICANT: Yuqiu, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C2
; CURRENT APPLICATION NUMBER: US/09/339,338A
; CURRENT FILING DATE: 1999-06-23
; NUMBER OF SEQ ID NOS: 315
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-339-338-282

Query Match           100.0%;   Score 21;   DB 4;   Length 502;
Best Local Similarity 100.0%;   Pred. No. 0.31;
Matches    21;   Conservative    0;   Mismatches    0;   Indels    0;   Gaps    0;

Qy     1  GTACCTCATGGCCCGGCTCAG  21
          |||||||||||||||||||||
Db   458  GTACCTCATGGCCCGGCTCAG  438

RESULT 5
US-09-433-826B-282/c
; Sequence 282, Application US/09433826B
; Patent No. 6579973
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C4
; CURRENT APPLICATION NUMBER: US/09/433,826B
; CURRENT FILING DATE: 1999-11-03
; NUMBER OF SEQ ID NOS: 474
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-433-826B-282

Query Match           100.0%;   Score 21;   DB 4;   Length 502;
Best Local Similarity 100.0%;   Pred. No. 0.31;
Matches    21;   Conservative    0;   Mismatches    0;   Indels    0;   Gaps    0;

Qy     1  GTACCTCATGGCCCGGCTCAG  21
          |||||||||||||||||||||
Db   458  GTACCTCATGGCCCGGCTCAG  438

RESULT 6
US-09-604-287A-282/c
; Sequence 282, Application US/09604287A
; Patent No. 6586572
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
```

; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
; FILE REFERENCE: 210121.470C7
; CURRENT APPLICATION NUMBER: US/09/604,287A
; CURRENT FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 489
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-604-287A-282

Query Match   100.0%; Score 21; DB 4; Length 502;
Best Local Similarity   100.0%; Pred. No. 0.31;
Matches   21; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

Qy   1 GTACCTCATGGCCCGGCTCAG 21
            |||||||||||||||||||||
Db   458 GTACCTCATGGCCCGGCTCAG 438

RESULT 7
US-09-300-958A-27/c
; Sequence 27, Application US/09300958A
; Patent No. 6495319
; GENERAL INFORMATION:
; APPLICANT: McClelland, Michael
; APPLICANT: Welsh, John
; APPLICANT: Trenkle, Thomas
; TITLE OF INVENTION: Reduced Complexity Nucleic Acid Targets and Methods of
; TITLE OF INVENTION: Using Same
; FILE REFERENCE: P-PH 3457
; CURRENT APPLICATION NUMBER: US/09/300,958A
; CURRENT FILING DATE: 1999-04-27
; PRIOR APPLICATION NUMBER: 60/083,331
; PRIOR FILING DATE: 1998-04-27
; PRIOR APPLICATION NUMBER: 60/098,070
; PRIOR FILING DATE: 1998-08-27
; PRIOR APPLICATION NUMBER: 60/118,624
; PRIOR FILING DATE: 1999-02-04
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 27
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-300-958A-27

Query Match   100.0%; Score 21; DB 4; Length 1907;
Best Local Similarity   100.0%; Pred. No. 0.33;
Matches   21; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

Qy   1 GTACCTCATGGCCCGGCTCAG 21
            |||||||||||||||||||||
Db   1100 GTACCTCATGGCCCGGCTCAG 1080

RESULT 8
US-09-570-593-4/c
; Sequence 4, Application US/09570593
; Patent No. 6566063
; GENERAL INFORMATION:
; APPLICANT: Kaufmann, Joerg
; APPLICANT: Xin, Hong
; APPLICANT: Harrowe, Greg
; TITLE OF INVENTION: EXPRESSION OF ETS-DOMAIN PROTEINS IN
; TITLE OF INVENTION: CANCER
; FILE REFERENCE: 2300-1556
; CURRENT APPLICATION NUMBER: US/09/570,593
; CURRENT FILING DATE: 2000-05-12
; PRIOR APPLICATION NUMBER: 60/134,112
; PRIOR FILING DATE: 1999-05-14
; NUMBER OF SEQ ID NOS: 13

; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (96)...(1211)
; OTHER INFORMATION: Human epithelial-restricted with serine box (ESX)
; OTHER INFORMATION: protein.
US-09-570-593-4

Query Match   100.0%; Score 21; DB 4; Length 1907;
Best Local Similarity   100.0%; Pred. No. 0.33;
Matches   21; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

Qy   1 GTACCTCATGGCCCGGCTCAG 21
            |||||||||||||||||||||
Db   1100 GTACCTCATGGCCCGGCTCAG 1080

RESULT 9
US-08-746-789A-1/c
; Sequence 1, Application US/08746789A
; Patent No. 5789200
; GENERAL INFORMATION:
; APPLICANT: Ismail Kola, Martin J. Tymms, Christine DeBouck
; TITLE OF INVENTION: A No. 5789200el Human ETS Family Member, ELF3
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SmithKline Beecham Corporation
; STREET: 709 Swedeland Road, P.O. Box 1539
; CITY: King of Prussia
; STATE: PA
; COUNTRY: USA
; ZIP: 19406-0939
; COMPUTER READABLE FORM:
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
; COMPUTER: IBM 486
; OPERATING SYSTEM: WINDOWS FOR WORKGROUPS
; SOFTWARE: MICROSOFT WORD
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/746,789A
; FILING DATE: No. 5789200ember 15, 1996
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: William T. Han
; REGISTRATION NUMBER: 34,344
; REFERENCE/DOCKET NUMBER: ATG 50024
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 610 270 5219
; TELEFAX: 610 270 4026
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1920
; TYPE: Nucleic Acid
; STRANDEDNESS: Single
; TOPOLOGY: Linear
; ANTI-SENSE: No
US-08-746-789A-1

Query Match   100.0%; Score 21; DB 1; Length 1920;
Best Local Similarity   100.0%; Pred. No. 0.33;
Matches   21; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

Qy   1 GTACCTCATGGCCCGGCTCAG 21
            |||||||||||||||||||||
Db   1119 GTACCTCATGGCCCGGCTCAG 1099

```
RESULT 10
US-08-479-722B-1/c
; Sequence 1, Application US/08479722B
; GENERAL INFORMATION:
;    APPLICANT: Bonadio, Jeffrey
;    APPLICANT: Yin, Wushan
;    TITLE OF INVENTION: LATENT TGF( BINDING PROTEIN (LTBP)
;    TITLE OF INVENTION: GENES, COMPOSITIONS AND METHODS
;    NUMBER OF SEQUENCES: 13
;    CORRESPONDENCE ADDRESS:
;    ADDRESSEE: Williams, Morgan & Amerson
;    STREET: 7676 Hillmont, Suite 250
;    CITY: Houston
;    STATE: Texas
;    COUNTRY: USA
;    ZIP: 77040
;    COMPUTER READABLE FORM:
;    MEDIUM TYPE: Floppy disk
;    COMPUTER: IBM PC compatible
;    OPERATING SYSTEM: PC-DOS/MS-DOS
;    SOFTWARE: PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;    APPLICATION NUMBER: US/08/479,722B
;    FILING DATE: 07-JUN-1995
;    CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;    APPLICATION NUMBER: US PCT/US95/02251
;    FILING DATE: 21-FEB-1995
;    PRIOR APPLICATION DATA:
;    APPLICATION NUMBER: US 08/316,650
;    FILING DATE: 30-SEP-1994
;    PRIOR APPLICATION DATA:
;    APPLICATION NUMBER: US 08/199,780
;    FILING DATE: 18-FEB-1994
;    ATTORNEY/AGENT INFORMATION:
;    NAME: Fussey, Shelley P.M.
;    REGISTRATION NUMBER: 39,458
;    REFERENCE/DOCKET NUMBER: 4100.000500/FUS
;    TELECOMMUNICATION INFORMATION:
;    TELEPHONE: (713) 934-7000
;    TELEFAX: (713) 934-7011
; INFORMATION FOR SEQ ID NO: 1:
;    SEQUENCE CHARACTERISTICS:
;    LENGTH: 5499 base pairs
;    TYPE: nucleic acid
;    STRANDEDNESS: single
;    TOPOLOGY: linear
;    MOLECULE TYPE:
;    DESCRIPTION: /desc = "DNA"
;    FEATURE:
;    NAME/KEY: CDS
;    LOCATION: 1..5499
US-08-479-722B-1

Query Match             78.1%;  Score 16.4;  DB 3;  Length 5499;
Best Local Similarity   94.4%;  Pred. No. 49;
Matches   17;  Conservative   0;  Mismatches   0;  Indels   1;  Gaps   0;

Qy      3 ACCTCATGGCCCGGCTCA 20
           |||||| |||||||||||
Db   3158 ACCTCATAGCCCGGCTCA 3141


RESULT 11
PCT-US95-02251-17/c
; Sequence 17, Application PC/TUS9502251
; GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR STIMULATING BONE
;    TITLE OF INVENTION: CELLS
;    NUMBER OF SEQUENCES: 18
;    CORRESPONDENCE ADDRESS:
;    ADDRESSEE: Arnold, White & Durkee
;    STREET: P.O. Box 4433
;    CITY: Houston
;    STATE: Texas
;    COUNTRY: United States of America
;    ZIP: 77210
;    COMPUTER READABLE FORM:
;    MEDIUM TYPE: Floppy disk
;    COMPUTER: IBM PC compatible
;    OPERATING SYSTEM: PC-DOS/MS-DOS/ASCII
;    SOFTWARE: PatentIn Release #1.0, Version
;    SOFTWARE: #1.30
;    CURRENT APPLICATION DATA:
;    APPLICATION NUMBER: PCT/US95/02251
;    FILING DATE: CONCURRENTLY HEREWITH
;    CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;    APPLICATION NUMBER: US 08/316,650
;    FILING DATE: 30-SEP-1994
;    CLASSIFICATION:
;    APPLICATION NUMBER: US 08/199,780
;    FILING DATE: 18-FEB-1994
;    CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;    NAME: Parker, David L.
;    REGISTRATION NUMBER: 32,165
;    REFERENCE/DOCKET NUMBER: UMIC009P--
;    TELECOMMUNICATION INFORMATION:
;    TELEPHONE: (512) 418-3000
;    TELEFAX: (713) 789-2679
;    TELEX: 79-0924
; INFORMATION FOR SEQ ID NO: 17:
;    SEQUENCE CHARACTERISTICS:
;    LENGTH: 5502 base pairs
;    TYPE: nucleic acid
;    STRANDEDNESS: single
;    TOPOLOGY: linear
;    MOLECULE TYPE: other nucleic acid
;    DESCRIPTION: /desc = "DNA"
;    FEATURE:
;    NAME/KEY: CDS
;    LOCATION: 1..5502
PCT-US95-02251-17

Query Match             78.1%;  Score 16.4;  DB 5;  Length 5502;
Best Local Similarity   94.4%;  Pred. No. 49;
Matches   17;  Conservative   0;  Mismatches   0;  Indels   1;  Gaps   0;

Qy      3 ACCTCATGGCCCGGCTCA 20
           |||||| |||||||||||
Db   3158 ACCTCATAGCCCGGCTCA 3141


RESULT 12
US-09-213-767-1/c
; Sequence 1, Application US/09213767
; Patent No. 5948680
; GENERAL INFORMATION:
;    APPLICANT: Brenda F. Baker
;    APPLICANT: Lex M. Cowsert
;    TITLE OF INVENTION: ANTISENSE MODULATION OF ELK-1 EXPRESSION
;    FILE REFERENCE: RTS-0024
;    CURRENT APPLICATION NUMBER: US/09/213,767
;    CURRENT FILING DATE: 1998-12-17
;    NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 1
;    LENGTH: 2266
;    TYPE: DNA
;    ORGANISM: Homo sapiens
;    FEATURE:
;    NAME/KEY: CDS
;    LOCATION: (316)..(1602)
US-09-213-767-1
```

Query Match   77.1%; Score 16.2;   DB 2; Length 2266;
Best Local Similarity 85.7%; Pred. No. 59;
Matches   18; Conservative   0; Mismatches   3; Indels   0; Gaps   0;

Qy   1 GTACCTCATGGCCCGGCTCAG 21
          |||||| || ||||||||||
Db   513 GTACCGCAAGGCCCGGCTCAG 493

RESULT 13
US-09-103-840A-2
; Sequence 2, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
;   APPLICANT: FLEISCHMAN, Robert D.
;   APPLICANT: WHITE, Owen R.
;   APPLICANT: FRASER, Claire M.
;   APPLICANT: VENTER, John C.
;   TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
;   TITLE OF INVENTION: TUBERCULOSIS
;   FILE REFERENCE: 24366-20007.00
;   CURRENT APPLICATION NUMBER: US/09/103,840A
;   CURRENT FILING DATE: 1998-06-24
;   SOFTWARE: PatentIn Ver. 2.1
;   NUMBER OF SEQ ID NOS: 2
;   SEQ ID NO 2
;   LENGTH: 4403765
;   TYPE: DNA
;   ORGANISM: Mycobacterium tuberculosis
;   FEATURE:
;   OTHER INFORMATION: CDC 1551
;   OTHER INFORMATION: "n" bases at various positions throughout the sequence
;   OTHER INFORMATION: represent a, t, c or g
US-09-103-840A-2

Query Match   77.1%; Score 16.2;   DB 3; Length 4403765;
Best Local Similarity 85.7%; Pred. No. 54;
Matches   18; Conservative   0; Mismatches   3; Indels   0; Gaps   0;

Qy   1 GTACCTCATGGCCCGGCTCAG 21
          |||| |||||||||||
Db 4316894 GGACCTGATGGCCCGGCTCGG 4316914

RESULT 14
US-09-103-840A-2/c
; Sequence 2, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
;   APPLICANT: FLEISCHMAN, Robert D.
;   APPLICANT: WHITE, Owen R.
;   APPLICANT: FRASER, Claire M.
;   APPLICANT: VENTER, John C.
;   TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
;   TITLE OF INVENTION: TUBERCULOSIS
;   FILE REFERENCE: 24366-20007.00
;   CURRENT APPLICATION NUMBER: US/09/103,840A
;   CURRENT FILING DATE: 1998-06-24
;   SOFTWARE: PatentIn Ver. 2.1
;   NUMBER OF SEQ ID NOS: 2
;   SEQ ID NO 2
;   LENGTH: 4403765
;   TYPE: DNA
;   ORGANISM: Mycobacterium tuberculosis
;   FEATURE:
;   OTHER INFORMATION: CDC 1551
;   OTHER INFORMATION: "n" bases at various positions throughout the sequence
;   OTHER INFORMATION: represent a, t, c or g
US-09-103-840A-2

Query Match   77.1%; Score 16.2;   DB 3; Length 4403765;
Best Local Similarity 85.7%; Pred. No. 54;

Matches   18; Conservative   0; Mismatches   3; Indels   0; Gaps   0;

Qy   1 GTACCTCATGGCCCGGCTCAG 21
          |||||||||||||||||
Db 3052714 GTACCTCATGGCCGCTGTTCAG 3052694

RESULT 15
US-09-103-840A-1
; Sequence 1, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
;   APPLICANT: FLEISCHMAN, Robert D.
;   APPLICANT: WHITE, Owen R.
;   APPLICANT: FRASER, Claire M.
;   APPLICANT: VENTER, John C.
;   TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
;   TITLE OF INVENTION: TUBERCULOSIS
;   FILE REFERENCE: 24366-20007.00
;   CURRENT APPLICATION NUMBER: US/09/103,840A
;   CURRENT FILING DATE: 1998-06-24
;   NUMBER OF SEQ ID NOS: 2
;   SOFTWARE: PatentIn Ver. 2.1
;   SEQ ID NO 1
;   LENGTH: 4411529
;   TYPE: DNA
;   ORGANISM: Mycobacterium tuberculosis
;   OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match   77.1%; Score 16.2;   DB 3; Length 4411529;
Best Local Similarity 85.7%; Pred. No. 54;
Matches   18; Conservative   0; Mismatches   3; Indels   0; Gaps   0;

Qy   1 GTACCTCATGGCCCGGCTCAG 21
          |||||||||||||
Db 4324638 GGACCTGATGGCCCGGCTCGG 4324658

Search completed: February 13, 2004, 01:55:01
Job time : 20.2079 secs

OM nucleic - nucleic search, using sw model

```
                 Copyright  (c) 1993 - 2004 Compugen Ltd.
                            GenCore version 5.1.6
```

Run on: February 12, 2004, 21:46:16 ; Search time 1.20792 Seconds
                                              (without alignments)
                                 7673.534 Million cell updates/sec

Title: US-08-978-217-13
Perfect score: 21
Sequence: 1 CCGGGACATCCTCATCCACCC 21

Scoring table: IDENTITY NUC
                Gapop 10.0 , Gapext 1.0

Searched: 569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters: 1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                  Maximum Match 100%
                  Listing first 45 summaries

Database :   Issued_Patents NA:*
                1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
                2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
                3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
                4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
                5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
                6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	21	100.0	502	4	US-09-389-681-282	Sequence 282, App
	2	21	100.0	502	4	US-09-620-405B-282	Sequence 282, App
	3	21	100.0	502	4	US-09-339-338-282	Sequence 282, App
	4	21	100.0	502	4	US-09-433-826B-282	Sequence 282, App
	5	21	100.0	502	4	US-09-604-287A-282	Sequence 282, App
	6	21	100.0	1907	4	US-09-300-958A-27	Sequence 27, Appli
	7	21	100.0	1907	4	US-09-570-593-4	Sequence 4, Appli
	8	16.4	100.0	1920	1	US-08-746-789A-1	Sequence 1, Appli
	9	16.4	78.1	1086	4	US-09-328-352-99	Sequence 99, Appli
c	10	16.2	77.1	165	1	US-08-456-647B-1	Sequence 1, Appli
c	11	16.2	77.1	165	2	US-08-237-401A-1	Sequence 1, Appli
	12	16.2	77.1	361	4	US-09-643-597-303	Sequence 303, App
	13	16.2	77.1	361	4	US-09-480-884A-303	Sequence 303, App
	14	16.2	77.1	361	4	US-09-542-615A-303	Sequence 303, App
	15	16.2	77.1	361	4	US-09-606-421B-303	Sequence 303, App
	16	16.2	77.1	427	3	US-09-328-111-567	Sequence 567, App
c	17	16.2	77.1	1228	3	US-09-826-246-9	Sequence 9, Appli
c	18	16.2	77.1	1228	3	US-08-944-495-9	Sequence 9, Appli
c	19	16.2	77.1	1228	3	US-09-126-640-5	Sequence 5, Appli
c	20	16.2	77.1	1228	3	US-08-925-588-9	Sequence 9, Appli
c	21	16.2	77.1	1228	3	US-08-288-292A-5	Sequence 5, Appli
c	22	16.2	77.1	1228	3	US-09-372-044-9	Sequence 9, Appli
	23	16.2	77.1	1228	4	US-08-825-486-9	Sequence 9, Appli
	24	15.8	75.2	718	3	US-09-998-416-682	Sequence 682, App
	25	15.8	75.2	1362	4	US-09-252-991A-10470	Sequence 10470, A
c	26	15.8	75.2	1626	4	US-09-252-991A-10598	Sequence 10598, A
	27	15.8	75.2	1684	4	US-09-620-312D-287	Sequence 287, App
	28	15.8	75.2	2190	4	US-09-252-991A-10256	Sequence 10256, A
	29	15.2	72.4	492	4	US-09-252-991A-880	Sequence 880, App
c	30	15.2	72.4	510	4	US-09-252-991A-4285	Sequence 4285, Ap
c	31	15.2	72.4	636	4	US-09-702-705-1668	Sequence 1668, Ap
c	32	15.2	72.4	636	4	US-09-736-457-1668	Sequence 1668, Ap
	33	15.2	72.4	1002	4	US-09-252-991A-11872	Sequence 11872, A
	34	15.2	72.4	1026	4	US-09-129-033-1	Sequence 1, Appli
	35	15.2	72.4	1068	4	US-09-252-991A-15054	Sequence 15054, A
c	36	15.2	72.4	1074	4	US-09-516-914-16	Sequence 16, Appl
c	37	15.2	72.4	1103	4	US-09-892-074-1	Sequence 1, Appli
	38	15.2	72.4	1281	4	US-09-252-991A-856	Sequence 856, App
	39	15.2	72.4	1320	4	US-08-461-775-8	Sequence 8, Appli
	40	15.2	72.4	1320	3	US-09-031-606-8	Sequence 8, Appli
	41	15.2	72.4	1464	4	US-09-252-991A-11508	Sequence 11508, A
	42	15.2	72.4	1515	3	US-09-292-768-5	Sequence 5, Appli
c	43	15.2	72.4	1527	4	US-09-252-991A-815	Sequence 815, App
	44	15.2	72.4	1620	2	US-08-461-775-10	Sequence 10, Appl
c	45	15.2	72.4	1620	3	US-09-031-606-10	Sequence 10, Appl

ALIGNMENTS

RESULT 1
US-09-389-681-282

```
; Sequence 282, Application US/09389681A
; Patent No. 6518237
; GENERAL INFORMATION:
; APPLICANT: Yuqui, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C3
; CURRENT APPLICATION NUMBER: US/09/389,681A
; CURRENT FILING DATE: 1999-09-02
; NUMBER OF SEQ ID NOS: 463
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-389-681-282

  Query Match             100.0%;  Score 21;  DB 4;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 0.92;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        290 CCGGGACATCCTCATCCACCC 310
```

RESULT 2
US-09-620-405B-282

```
; Sequence 282, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
; FILE REFERENCE: 210121.470C8
; CURRENT APPLICATION NUMBER: US/09/620,405B
; CURRENT FILING DATE: 2000-07-20
; NUMBER OF SEQ ID NOS: 495
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
```

```
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-620-405B-282

Query Match     100.0%;  Score 21;  DB 4;  Length 502;
Best Local Similarity  100.0%;  Pred. No. 0.92;
Matches  21;  Conservative  0;  Mismatches  0;  Indels  0;  Gaps  0;

Qy      1 CCGGGACATCCTCATCCACCC 21
            |||||||||||||||||||||
Db    290 CCGGGACATCCTCATCCACCC 310
```

```
RESULT 3
US-09-339-338-282
;  Sequence 282, Application US/09339338A
;  Patent No. 6573368
;  GENERAL INFORMATION:
;   APPLICANT: Yuqiu, Jiang
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.470C2
;   CURRENT APPLICATION NUMBER: US/09/339,338A
;   CURRENT FILING DATE: 1999-06-23
;   NUMBER OF SEQ ID NOS: 315
;   SOFTWARE: FastSEQ for Windows Version 3.0
;  SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-339-338-282

Query Match     100.0%;  Score 21;  DB 4;  Length 502;
Best Local Similarity  100.0%;  Pred. No. 0.92;
Matches  21;  Conservative  0;  Mismatches  0;  Indels  0;  Gaps  0;

Qy      1 CCGGGACATCCTCATCCACCC 21
            |||||||||||||||||||||
Db    290 CCGGGACATCCTCATCCACCC 310
```

```
RESULT 4
US-09-433-826B-282
;  Sequence 282, Application US/09433826B
;  Patent No. 6579973
;  GENERAL INFORMATION:
;   APPLICANT: Jiang, Yuqui
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Harlocker, Susan L.
;   TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.470C4
;   CURRENT APPLICATION NUMBER: US/09/433,826B
;   CURRENT FILING DATE: 1999-11-03
;   NUMBER OF SEQ ID NOS: 474
;   SOFTWARE: FastSEQ for Windows Version 3.0
;  SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-433-826B-282

Query Match     100.0%;  Score 21;  DB 4;  Length 502;
Best Local Similarity  100.0%;  Pred. No. 0.92;
Matches  21;  Conservative  0;  Mismatches  0;  Indels  0;  Gaps  0;

Qy      1 CCGGGACATCCTCATCCACCC 21
```

```
RESULT 5
US-09-604-287A-282
;  Sequence 282, Application US/09604287A
;  Patent No. 6586672
;  GENERAL INFORMATION:
;   APPLICANT: Jiang, Yuqiu
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Harlocker, Susan L.
;   APPLICANT: Hepler, William T.
;   TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
;   FILE REFERENCE: 210121.470C7
;   CURRENT APPLICATION NUMBER: US/09/604,287A
;   CURRENT FILING DATE: 2000-06-22
;   NUMBER OF SEQ ID NOS: 489
;   SOFTWARE: FastSEQ for Windows Version 3.0
;  SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-604-287A-282

Query Match     100.0%;  Score 21;  DB 4;  Length 502;
Best Local Similarity  100.0%;  Pred. No. 0.92;
Matches  21;  Conservative  0;  Mismatches  0;  Indels  0;  Gaps  0;

Qy      1 CCGGGACATCCTCATCCACCC 21
            |||||||||||||||||||||
Db    290 CCGGGACATCCTCATCCACCC 310
```

```
RESULT 6
US-09-300-958A-27
;  Sequence 27, Application US/09300958A
;  Patent No. 6495319
;  GENERAL INFORMATION:
;   APPLICANT: McClelland, Michael
;   APPLICANT: Welsh, John
;   APPLICANT: Trenkle, Thomas
;   TITLE OF INVENTION: Reduced Complexity Nucleic Acid Targets and Methods of
;   TITLE OF INVENTION: Using Same
;   FILE REFERENCE: P-PH 3457
;   CURRENT APPLICATION NUMBER: US/09/300,958A
;   CURRENT FILING DATE: 1999-04-27
;   PRIOR APPLICATION NUMBER: 60/083,331
;   PRIOR FILING DATE: 1998-04-27
;   PRIOR APPLICATION NUMBER: 60/098,070
;   PRIOR FILING DATE: 1998-08-27
;   PRIOR APPLICATION NUMBER: 60/118,624
;   PRIOR FILING DATE: 1999-02-04
;   NUMBER OF SEQ ID NOS: 85
;   SOFTWARE: PatentIn Ver. 2.0
;  SEQ ID NO 27
;   LENGTH: 1907
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-300-958A-27

Query Match     100.0%;  Score 21;  DB 4;  Length 1907;
Best Local Similarity  100.0%;  Pred. No. 1;
Matches  21;  Conservative  0;  Mismatches  0;  Indels  0;  Gaps  0;

Qy      1 CCGGGACATCCTCATCCACCC 21
            |||||||||||||||||||||
Db    932 CCGGGACATCCTCATCCACCC 952
```

RESULT 7
US-09-570-593-4
; Sequence 4, Application US/09570593
; Patent No. 6566063
; GENERAL INFORMATION:
; APPLICANT: Kaufmann, Joerg
; APPLICANT: Xin, Hong
; APPLICANT: Harrowe, Greg
; TITLE OF INVENTION: EXPRESSION OF ETS-DOMAIN PROTEINS IN
; TITLE OF INVENTION: CANCER
; FILE REFERENCE: 2300-1556
; CURRENT APPLICATION NUMBER: US/09/570,593
; CURRENT FILING DATE: 2000-05-12
; PRIOR APPLICATION NUMBER: 60/134,112
; PRIOR FILING DATE: 1999-05-14
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FastSEQ for Windows Version 4.0
US-09-570-593-4
;
SEQ ID NO 4
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (96)...(1211)
; OTHER INFORMATION: Human epithelial-restricted with serine box (ESX)
; OTHER INFORMATION: protein.
US-09-570-593-4

Query Match   100.0%; Score 21; DB 4; Length 1907;
Best Local Similarity   100.0%; Pred. No. 1;
Matches   21; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

Qy   1 CCGGGACATCCTCATCCACCC 21
          |||||||||||||||||||||
Db   932 CCGGGACATCCTCATCCACCC 952

RESULT 8
US-08-746-789A-1
; Sequence 1, Application US/08746789A
; Patent No. 5789200
; GENERAL INFORMATION:
; APPLICANT: Ismail Kola, Martin J. Tymms, Christine DeBouck
; TITLE OF INVENTION: A No. 5789200el Human ETS Family Member, ELF3
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SmithKline Beecham Corporation
; STREET: 709 Swedeland Road, P.O. Box 1539
; CITY: King of Prussia
; STATE: PA
; COUNTRY: USA
; ZIP: 19406-0939
; COMPUTER READABLE FORM:
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
; COMPUTER: IBM 486
; OPERATING SYSTEM: WINDOWS FOR WORKGROUPS
; SOFTWARE: MICROSOFT WORD
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/746,789A
; FILING DATE: No. 5789200ember 15, 1996
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: William T. Han
; REGISTRATION NUMBER: 34,344
; REFERENCE/DOCKET NUMBER: ATG 50024
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 610 270 5219
; TELEFAX: 610 270 4026
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:

; LENGTH: 1920
; TYPE: Nucleic Acid
; STRANDEDNESS: Single
; TOPOLOGY: Linear
; ANTI-SENSE: No
US-08-746-789A-1

Query Match   100.0%; Score 21; DB 1; Length 1920;
Best Local Similarity   100.0%; Pred. No. 1;
Matches   21; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

Qy   1 CCGGGACATCCTCATCCACCC 21
          |||||||||||||||||||||
Db   951 CCGGGACATCCTCATCCACCC 971

RESULT 9
US-09-328-352-99/c
; Sequence 99, Application US/09328352
; Patent No. 5562958
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
; TITLE OF INVENTION: BAUMANNI FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: GTC99-03PA
; CURRENT APPLICATION NUMBER: US/09/328,352
; CURRENT FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 8252
;
SEQ ID NO 99
; LENGTH: 1086
; TYPE: DNA
; ORGANISM: Acinetobacter baumannii
US-09-328-352-99

Query Match   78.1%; Score 16.4; DB 4; Length 1086;
Best Local Similarity   94.4%; Pred. No. 1.1e+02;
Matches   17; Conservative   0; Mismatches   1; Indels   0; Gaps   0;

Qy   4 GGACATCCTCATCCACCC 21
          ||||| ||||||||||||
Db   75 GGACATACTCATCCACCC 58

RESULT 10
US-08-456-647B-1/c
; Sequence 1, Application US/08456647B
; Patent No. 5811516
; GENERAL INFORMATION:
; APPLICANT: Lemke Ph.D. et al., Greg E.
; TITLE OF INVENTION: PROTEIN-TYROSINE KINASE GENES
; NUMBER OF SEQUENCES: 54
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 4225 Executive Square, Suite 1400
; CITY: La Jolla
; STATE: CA
; COUNTRY: US
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/456,647B
; FILING DATE: 02-JUN-1995
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/237,401
; FILING DATE: 02-MAY-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/884,486
; FILING DATE: 15-MAY-1992

```
 ;       ATTORNEY/AGENT INFORMATION:
 ;         NAME: Wetherell Ph.D., John R.
 ;         REGISTRATION NUMBER: 31,678
 ;         REFERENCE/DOCKET NUMBER: 07251/007002
 ;       TELECOMMUNICATION INFORMATION:
 ;         TELEPHONE: (619) 678-5070
 ;         TELEFAX: (619) 678-5099
 ;   INFORMATION FOR SEQ ID NO: 1:
 ;       SEQUENCE CHARACTERISTICS:
 ;         LENGTH: 165 base pairs
 ;         TYPE: nucleic acid
 ;         STRANDEDNESS: single
 ;         TOPOLOGY: linear
 ;       MOLECULE TYPE: DNA
 ;       IMMEDIATE SOURCE:
 ;         CLONE: Tyro-1
 ;       FEATURE:
 ;         NAME/KEY: CDS
 ;         LOCATION: 1..165
US-08-456-647B-1

  Query Match             77.1%;  Score 16.2;  DB 1;  Length 165;
  Best Local Similarity   85.7%;  Pred. No. 1.1e+02;
  Matches  18;  Conservative   0;  Mismatches   3;  Indels   0;  Gaps   0;

Qy    1 CCGGGACATCCTCATCCACCC 21
        |||||| |||||| ||||
Db   76 CCGGGTCATCCTCAAGCACCC 56

RESULT 11
US-08-237-401A-1/c
; Sequence 1, Application US/08237401A
; Patent No. 5837448
; GENERAL INFORMATION:
;   APPLICANT: Lemke Ph.D. et al., Greg E.
;   TITLE OF INVENTION: PROTEIN-TYROSINE KINASE GENES
;   NUMBER OF SEQUENCES: 54
;   CORRESPONDENCE ADDRESS:
;     ADDRESSEE: Fish & Richardson P.C.
;     STREET: 4225 Executive Square, Suite 1400
;     CITY: La Jolla
;     STATE: CA
;     COUNTRY: US
;     ZIP: 92037
;   COMPUTER READABLE FORM:
;     MEDIUM TYPE: Floppy disk
;     COMPUTER: IBM PC compatible
;     OPERATING SYSTEM: PC-DOS/MS-DOS
;     SOFTWARE: PatentIn Release #1.0, Version #1.25
;   CURRENT APPLICATION DATA:
;     APPLICATION NUMBER: US/08/237,401A
;     FILING DATE: 02-MAY-1994
;     CLASSIFICATION: 435
;   PRIOR APPLICATION DATA:
;     APPLICATION NUMBER: US 07/884,486
;     FILING DATE: 15-MAY-1992
;   ATTORNEY/AGENT INFORMATION:
;     NAME: Haile Ph.D., Lisa A.
;     REGISTRATION NUMBER: 38,347
;     REFERENCE/DOCKET NUMBER: 07251/007001
;   TELECOMMUNICATION INFORMATION:
;     TELEPHONE: (619) 678-5070
;     TELEFAX: (619) 678-5099
; INFORMATION FOR SEQ ID NO: 1:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 165 base pairs
;     TYPE: nucleic acid
;     STRANDEDNESS: single
;     TOPOLOGY: linear
;   MOLECULE TYPE: DNA
;   IMMEDIATE SOURCE:
;     CLONE: Tyro-1
```

```
 ;       FEATURE:
 ;         NAME/KEY: CDS
 ;         LOCATION: 1..165
US-08-237-401A-1

  Query Match             77.1%;  Score 16.2;  DB 2;  Length 165;
  Best Local Similarity   85.7%;  Pred. No. 1.1e+02;
  Matches  18;  Conservative   0;  Mismatches   3;  Indels   0;  Gaps   0;

Qy    1 CCGGGACATCCTCATCCACCC 21
        |||||| |||||| ||||
Db   76 CCGGGTCATCCTCAAGCACCC 56

RESULT 12
US-09-643-597-303
; Sequence 303, Application US/09643597
; Patent No. 6426072
; GENERAL INFORMATION:
;   APPLICANT: Wang, Tongtong
;   APPLICANT: Fan, Liqun
;   APPLICANT: Kalos, Michael D.
;   APPLICANT: Bangur, Chaitanya S.
;   APPLICANT: Hosken, Nancy
;   APPLICANT: Fanger, Gary R.
;   APPLICANT: Li, Samuel X.
;   APPLICANT: Wang, Aijun
;   APPLICANT: Skeiky, Yasir A.W.
;   APPLICANT: Henderson, Robert A.
;   APPLICANT: McNeill, Patricia D.
;   TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
;   TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
;   FILE REFERENCE: 210121.455C11
;   CURRENT APPLICATION NUMBER: US/09/643,597
;   CURRENT FILING DATE: 2000-08-21
;   NUMBER OF SEQ ID NOS: 369
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 303
;   LENGTH: 361
;   TYPE: DNA
;   ORGANISM: Homo sapien
;   FEATURE:
;     NAME/KEY: misc_feature
;     LOCATION: (1)...(361)
;     OTHER INFORMATION: n = A,T,C or G
US-09-643-597-303

  Query Match             77.1%;  Score 16.2;  DB 4;  Length 361;
  Best Local Similarity   85.7%;  Pred. No. 1.2e+02;
  Matches  18;  Conservative   0;  Mismatches   3;  Indels   0;  Gaps   0;

Qy    1 CCGGGACATCCTCATCCACCC 21
        |||||| |||||| ||||
Db  257 CCGGGACGTCCTCCCCCACCC 277

RESULT 13
US-09-480-884A-303
; Sequence 303, Application US/09480884A
; Patent No. 6482597
; GENERAL INFORMATION:
;   APPLICANT: Wang, Tongtong
;   APPLICANT: Fan, Liqun
;   APPLICANT: Hosken, Nancy A.
;   APPLICANT: Kalos, Michael D.
;   APPLICANT: Fanger, Gary R.
;   TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY
;   TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
;   FILE REFERENCE: 210121.455C6
;   CURRENT APPLICATION NUMBER: US/09/480,884A
;   CURRENT FILING DATE: 2001-08-27
;   NUMBER OF SEQ ID NOS: 330
;   SOFTWARE: FastSEQ for Windows Version 3.0
```

```
; SEQ ID NO 303
; LENGTH: 361
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(361)
; OTHER INFORMATION: n = A,T,C or G
US-09-480-884A-303

Query Match    77.1%;   Score 16.2;   DB 4;   Length 361;
Best Local Similarity   85.7%;   Pred. No. 1.2e+02;
Matches   18;   Conservative   0;   Mismatches   3;   Indels   0;   Gaps   0;

Qy    1 CCGGGACATCCTCATCCACCC 21
          |||||||| ||||| ||||||
Db  257 CCGGGACGTCCTCCCCCACCC 277


RESULT 14
US-09-542-615A-303
; Sequence 303, Application US/09542615A
; Patent No. 6518256
; GENERAL INFORMATION:
; APPLICANT: Wang, Tongtong
; APPLICANT: Fan, Liqun
; APPLICANT: Kalos, Michael D.
; APPLICANT: Bangur, Chaitanya S.
; APPLICANT: Hosken, Nancy A.
; APPLICANT: Fanger, Gary R.
; TITLE OF INVENTION:  COMPOUNDS AND METHODS FOR THERAPY
; TITLE OF INVENTION:  AND DIAGNOSIS OF LUNG CANCER
; FILE REFERENCE: 2101121.455C8
; CURRENT APPLICATION NUMBER: US/09/542,615A
; CURRENT FILING DATE: 2000-04-14
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 303
; LENGTH: 361
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(361)
; OTHER INFORMATION: n = A,T,C or G
US-09-542-615A-303

Query Match    77.1%;   Score 16.2;   DB 4;   Length 361;
Best Local Similarity   85.7%;   Pred. No. 1.2e+02;
Matches   18;   Conservative   0;   Mismatches   3;   Indels   0;   Gaps   0;

Qy    1 CCGGGACATCCTCATCCACCC 21
          |||||||| ||||| ||||||
Db  257 CCGGGACGTCCTCCCCCACCC 277


RESULT 15
US-09-606-421B-303
; Sequence 303, Application US/09606421B
; Patent No. 6531315
; GENERAL INFORMATION:
; APPLICANT: Wang, Tongtong
; APPLICANT: Fan, Liqun
; APPLICANT: Kalos, Michael D.
; APPLICANT: Bangur, Chaitanya S.
; APPLICANT: Hosken, Nancy
; APPLICANT: Fanger, Gary R.
; APPLICANT: Li, Samuel X.
; APPLICANT: Wang, Aijun
; APPLICANT: Skeiky, Yasir A.W.
; TITLE OF INVENTION:  COMPOSITIONS AND METHODS FOR THE THERAPY
; TITLE OF INVENTION:  AND DIAGNOSIS OF LUNG CANCER
; FILE REFERENCE: 210121.455C9
; CURRENT APPLICATION NUMBER: US/09/606,421B
; CURRENT FILING DATE: 2000-06-28
; NUMBER OF SEQ ID NOS: 358
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 303
; LENGTH: 361
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(361)
; OTHER INFORMATION: n = A,T,C or G
US-09-606-421B-303

Query Match    77.1%;   Score 16.2;   DB 4;   Length 361;
Best Local Similarity   85.7%;   Pred. No. 1.2e+02;
Matches   18;   Conservative   0;   Mismatches   3;   Indels   0;   Gaps   0;

Qy    1 CCGGGACATCCTCATCCACCC 21
          |||||||| ||||| ||||||
Db  257 CCGGGACGTCCTCCCCCACCC 277


Search completed: February 13, 2004, 01:54:42
Job time : 2.20792 secs
```

```
OM protein - nucleic search, using frame_plus_p2n model

           GenCore version 5.1.6
    Copyright (c) 1993 - 2004 Compugen Ltd.

Run on:    February 12, 2004, 19:34:21 ; Search time 4.03329 Seconds
                                         (without alignments)
                                         1750.959 Million cell updates/sec

Title:          US-08-978-217-12
Perfect score:  84
Sequence:       1 KNSSGWKEEVLQSRN 16

Scoring table:  BLOSUM62
    Xgapop 10.0 , Xgapext  0.5
    Ygapop 10.0 , Ygapext  0.5
    Fgapop  6.0 , Fgapext  7.0
    Delop   6.0 , Delext   7.0

Searched:       569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters:    1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries
```

Command line parameters:
```
-MODEL=frame+_p2n.model -DEV=xlh
-Q=/cgn2_1/USPTO_spool/US08978217/runat_10022004_133826_20481/app_query.fasta_1.1500
-DB=Issued_Patents_NA -QFMT=fastap -SUFFIX=rni -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15
-MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-USER=US08978217 @CGN_1_1.115 @runat_10022004_133826_20481 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database :    Issued_Patents_NA.*
    1:  /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
    2:  /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
    3:  /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
    4:  /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
    5:  /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
    6:  /cgn2_6/ptodata/1/ina/backfiles1.seq:*
```

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Query Length	DB	ID	Description
	1	84	100.0	237	4	US-09-016-434-927	Sequence 927, App
	2	84	100.0	463	4	US-09-300-958A-25	Sequence 25, Appl
	3	84	100.0	1907	4	US-09-300-958A-27	Sequence 27, Appl
	4	84	100.0	1907	4	US-09-570-593-4	Sequence 4, Appl
	5	84	100.0	1920	1	US-08-746-789A-1	Sequence 1, Appli
c	6	46	54.8	1348	4	US-09-638-649-6	Sequence 6, Appli
	7	46	54.8	8100	4	US-09-554-337-4	Sequence 4, Appli
	8	46	54.8	11517	1	US-07-920-281C-1	Sequence 1, Appli
	9	46	54.8	11517	4	US-08-466-277-1	Sequence 1, Appli
	10	46	54.8	15538	4	US-09-554-337-1	Sequence 1, Appli
c	11	45	53.6	993	4	US-09-464-535-25	Sequence 25, Appl
c	12	45	53.6	7492	4	US-09-299-141-5	Sequence 5, Appli
c	13	45	53.6	10627	1	US-08-060-925A-12	Sequence 12, Appli
	14	44	52.4	2763	4	US-09-668-680-8	Sequence 8, Appli
	15	44	52.4	3396	4	US-09-668-680-6	Sequence 6, Appli
	16	44	52.4	3423	4	US-09-668-680-7	Sequence 7, Appli
	17	44	52.4	50000	4	US-09-146-053-4	Sequence 4, Appli
	18	43	51.2	4417	3	US-07-741-453A-57	Sequence 57, Appl
	19	43	51.2	8543	3	US-08-496-944-1	Sequence 1, Appli
c	20	42.5	50.6	6396	4	US-09-620-312D-226	Sequence 226, App
	21	42	50.0	694	2	US-08-537-400-15	Sequence 15, Appl
	22	42	50.0	694	2	US-08-706-702-17	Sequence 17, Appl
	23	42	50.0	694	3	US-08-706-705-17	Sequence 17, Appl
	24	42	50.0	694	4	US-09-238-471-17	Sequence 17, Appl
c	25	42	50.0	1265	4	US-09-702-705-95	Sequence 95, Appl
c	26	42	50.0	1265	4	US-09-736-457-95	Sequence 95, Appl
	27	42	50.0	1485	3	US-08-484-661A-38	Sequence 38, Appl
	28	42	50.0	1485	3	US-08-656-664-38	Sequence 38, Appl
	29	42	50.0	1485	5	PCT-US96-09641-38	Sequence 38, Appl
	30	42	50.0	1716	3	US-08-484-661A-36	Sequence 36, Appl
	31	42	50.0	1716	3	US-08-656-664-36	Sequence 36, Appl
	32	42	50.0	1716	5	PCT-US96-09641-36	Sequence 36, Appl
	33	42	50.0	1737	3	US-08-484-661A-10	Sequence 10, Appl
	34	42	50.0	1737	3	US-08-656-664-10	Sequence 10, Appl
	35	42	50.0	1737	5	PCT-US96-09641-10	Sequence 10, Appl
	36	42	50.0	1769	3	US-09-257-584-6	Sequence 6, Appli
	37	42	50.0	1833	3	US-08-484-661A-7	Sequence 7, Appli
	38	42	50.0	1833	3	US-08-484-661A-15	Sequence 15, Appl
	39	42	50.0	1833	3	US-08-484-661A-18	Sequence 18, Appl
	40	42	50.0	1833	3	US-08-484-661A-22	Sequence 22, Appl
	41	42	50.0	1833	3	US-08-484-661A-25	Sequence 25, Appl
	42	42	50.0	1833	3	US-08-484-661A-28	Sequence 28, Appl
	43	42	50.0	1833	3	US-08-484-661A-32	Sequence 32, Appl
	44	42	50.0	1833	3	US-08-484-661A-34	Sequence 34, Appl
	45	42	50.0	1833	3	US-08-656-664-7	Sequence 7, Appli

ALIGNMENTS

```
RESULT 1
US-09-016-434-927
; Sequence 927, Application US/09016434
; Patent No. 6500938
; GENERAL INFORMATION:
;  APPLICANT: Janice Au-Young
;  APPLICANT: Jeffrey J. Seilhamer
;  TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF SIGNALING
;  TITLE OF INVENTION: PATHWAY GENE EXPRESSION
;  NUMBER OF SEQUENCES: 1490
;  CORRESPONDENCE ADDRESS:
;  ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
;  STREET: 3174 PORTER DRIVE
;  CITY: PALO ALTO
;  STATE: CALIFORNIA
;  COUNTRY: USA
;  ZIP: 94304
;  COMPUTER READABLE FORM:
;  MEDIUM TYPE: Floppy disk
;  COMPUTER: IBM PC Compatible
;  OPERATING SYSTEM: PC-DOS/MS-DOS
;  SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
;  CURRENT APPLICATION DATA:
;  APPLICATION NUMBER: US/09/016,434
;  FILING DATE: HEREWITH
;  CLASSIFICATION:
;  PRIOR APPLICATION DATA:
;  APPLICATION NUMBER:
;  FILING DATE:
;  CLASSIFICATION:
;  ATTORNEY/AGENT INFORMATION:
;  NAME: Zeller, Karen J.
;  REGISTRATION NUMBER: 37,071
;  REFERENCE/DOCKET NUMBER: PA-0002 US
;  TELECOMMUNICATION INFORMATION:
;  TELEPHONE: (650) 855-0555
```

```
;  TELEFAX:     (650) 845-4166
;  INFORMATION FOR SEQ ID NO:  927:
;     SEQUENCE CHARACTERISTICS:
;        LENGTH:  237 base pairs
;        TYPE:  nucleic acid
;        STRANDEDNESS:  single
;        TOPOLOGY:  linear
;     IMMEDIATE SOURCE:
;        LIBRARY:  COLNCRT01
;        CLONE:  773734
US-09-016-434-927

Alignment Scores:
Pred. No.:              9.19e-07          Length:         237
Score:                  84.00             Matches:        16
Percent Similarity:     100.00%           Conservative:   0
Best Local Similarity:  100.00%           Mismatches:     0
Query Match:            100.00%           Indels:         0
DB:                     4                 Gaps:           0

US-08-978-217-12 (1-16) x US-09-016-434-927 (1-237)

Qy    1 LysAsnSerSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
        ||||||||||||||||||||||||||||||||||||||||||||||
Db  116 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 163


RESULT 2
US-09-300-958A-25
;  Sequence 25, Application US/09300958A
;  Patent No. 6495319
;  GENERAL INFORMATION:
;     APPLICANT:  McClelland, Michael
;     APPLICANT:  Welsh, John
;     APPLICANT:  Trenkle, Thomas
;     TITLE OF INVENTION:  Reduced Complexity Nucleic Acid Targets and Methods of
;     TITLE OF INVENTION:  Using Same
;     FILE REFERENCE:  P-PH 3457
;     CURRENT APPLICATION NUMBER:  US/09/300,958A
;     CURRENT FILING DATE:  1999-04-27
;     PRIOR APPLICATION NUMBER:  60/083,331
;     PRIOR FILING DATE:  1998-04-27
;     PRIOR APPLICATION NUMBER:  60/098,070
;     PRIOR FILING DATE:  1998-08-27
;     PRIOR APPLICATION NUMBER:  60/118,624
;     PRIOR FILING DATE:  1999-02-04
;     NUMBER OF SEQ ID NOS:  85
;     SOFTWARE:  PatentIn Ver. 2.0
;  SEQ ID NO 25
;     LENGTH:  463
;     TYPE:  DNA
;     ORGANISM:  Homo sapiens
;     FEATURE:
;     NAME/KEY:  unsure
;     LOCATION:  (368)
;     NAME/KEY:  unsure
;     LOCATION:  (402)
;     NAME/KEY:  unsure
;     LOCATION:  (458)
US-09-300-958A-25

Alignment Scores:
Pred. No.:              2.03e-06          Length:         463
Score:                  84.00             Matches:        16
Percent Similarity:     100.00%           Conservative:   0
Best Local Similarity:  100.00%           Mismatches:     0
Query Match:            100.00%           Indels:         0
DB:                     4                 Gaps:           0

US-08-978-217-12 (1-16) x US-09-300-958A-25 (1-463)

Qy    1 LysAsnSerSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
        ||||||||||||||||||||||||||||||||||||||||||||||
Db    8 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 55
```

```
RESULT 3
US-09-300-958A-27
;  Sequence 27, Application US/09300958A
;  Patent No. 6495319
;  GENERAL INFORMATION:
;     APPLICANT:  McClelland, Michael
;     APPLICANT:  Welsh, John
;     APPLICANT:  Trenkle, Thomas
;     TITLE OF INVENTION:  Reduced Complexity Nucleic Acid Targets and Methods of
;     TITLE OF INVENTION:  Using Same
;     FILE REFERENCE:  P-PH 3457
;     CURRENT APPLICATION NUMBER:  US/09/300,958A
;     CURRENT FILING DATE:  1999-04-27
;     PRIOR APPLICATION NUMBER:  60/083,331
;     PRIOR FILING DATE:  1998-04-27
;     PRIOR APPLICATION NUMBER:  60/098,070
;     PRIOR FILING DATE:  1998-08-27
;     PRIOR APPLICATION NUMBER:  60/118,624
;     PRIOR FILING DATE:  1999-02-04
;     NUMBER OF SEQ ID NOS:  85
;     SOFTWARE:  PatentIn Ver. 2.0
;  SEQ ID NO 27
;     LENGTH:  1907
;     TYPE:  DNA
;     ORGANISM:  Homo sapiens
US-09-300-958A-27

Alignment Scores:
Pred. No.:              1.09e-05          Length:         1907
Score:                  84.00             Matches:        16
Percent Similarity:     100.00%           Conservative:   0
Best Local Similarity:  100.00%           Mismatches:     0
Query Match:            100.00%           Indels:         0
DB:                     4                 Gaps:           0

US-08-978-217-12 (1-16) x US-09-300-958A-27 (1-1907)

Qy     1 LysAsnSerSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
         ||||||||||||||||||||||||||||||||||||||||||||||
Db  1161 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1208


RESULT 4
US-09-570-593-4
;  Sequence 4, Application US/09570593
;  Patent No. 6566063
;  GENERAL INFORMATION:
;     APPLICANT:  Kaufmann, Joerg
;     APPLICANT:  Xin, Hong
;     APPLICANT:  Harrowe, Greg
;     TITLE OF INVENTION:  EXPRESSION OF ETS-DOMAIN PROTEINS IN
;     TITLE OF INVENTION:  CANCER
;     FILE REFERENCE:  2300-1556
;     CURRENT APPLICATION NUMBER:  US/09/570,593
;     CURRENT FILING DATE:  2000-05-12
;     PRIOR APPLICATION NUMBER:  60/134,112
;     PRIOR FILING DATE:  1999-05-14
;     NUMBER OF SEQ ID NOS:  13
;     SOFTWARE:  FastSEQ for Windows Version 4.0
;  SEQ ID NO 4
;     LENGTH:  1907
;     TYPE:  DNA
;     ORGANISM:  Homo sapiens
;     FEATURE:
;     NAME/KEY:  CDS
;     LOCATION:  (96)..(1211)
;     OTHER INFORMATION:  Human epithelial-restricted with serine box (ESX)
;     OTHER INFORMATION:  protein.
US-09-570-593-4

Alignment Scores:
Pred. No.:              1.09e-05          Length:         1907
Score:                  84.00             Matches:        16
```

```
Percent Similarity:        100.00%    Conservative:  0
Best Local Similarity:     100.00%    Mismatches:    0
Query Match:               100.00%    Indels:        0
DB:                        4          Gaps:          0

US-08-978-217-12 (1-16) x US-09-570-593-4 (1-1907)

Qy    1 LysAsnSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
        ||||||||||||||||||||||||||||||||||||||||||||
Db 1161 AAAAACTCAAGCGGCTGGAAGGAGGAGAGGTTCTCCAGAGTCGGAAC 1208

RESULT 5
US-08-746-789A-1
; Sequence 1, Application US/08746789A
; Patent No. 5789200
; GENERAL INFORMATION:
    TITLE OF INVENTION: A No. 5789200el Human ETS Family Member, ELF3
    NUMBER OF SEQUENCES: 4
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: SmithKline Beecham Corporation
      STREET: 709 Swedeland Road, P.O. Box 1539
      CITY: King of Prussia
      STATE: PA
      COUNTRY: USA
      ZIP: 19406-0939
    COMPUTER READABLE FORM:
      MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
      COMPUTER: IBM 486
      OPERATING SYSTEM: WINDOWS FOR WORKGROUPS
      SOFTWARE: MICROSOFT WORD
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/746,789A
      FILING DATE: No. 5789200ember 15, 1996
      CLASSIFICATION: 514
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER:
      FILING DATE:
    ATTORNEY/AGENT INFORMATION:
      NAME: William T. Han
      REGISTRATION NUMBER: 34,344
      REFERENCE/DOCKET NUMBER: ATG 50024
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 610 270 5219
      TELEFAX: 610 270 4026
    INFORMATION FOR SEQ ID NO: 1:
      SEQUENCE CHARACTERISTICS:
        LENGTH: 1920
        TYPE: Nucleic Acid
        STRANDEDNESS: Single
        TOPOLOGY: Linear
        ANTI-SENSE: No
US-08-746-789A-1

Alignment Scores:
Pred. No.:                 1.1e-05    Length:        1920
Score:                     84.00      Matches:       16
Percent Similarity:        100.00%    Conservative:  0
Best Local Similarity:     100.00%    Mismatches:    0
Query Match:               100.00%    Indels:        0
DB:                        1          Gaps:          0

US-08-978-217-12 (1-16) x US-08-746-789A-1 (1-1920)

Qy    1 LysAsnSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
        ||||||||||||||||||||||||||||||||||||||||||||
Db 1180 AAAAACTCAAGCGGCTGGAAGGAGGAGAGGTTCTCCAGAGTCGGAAC 1227

RESULT 6
US-09-638-649-6/c
; Sequence 6, Application US/09638649
; Patent No. 6563015
; GENERAL INFORMATION:
```

```
; APPLICANT: Stern, David M.
; APPLICANT: Schmidt, Ann Marie
; APPLICANT: Yan, Shi Du
; TITLE OF INVENTION: TRANSGENIC MICE OVER-EXPRESSING RECEPTOR FOR ADVANCED
; TITLE OF INVENTION: GLYCATION ENDPRODUCT (RAGE) AND MUTANT APP IN BRAIN AND
; TITLE OF INVENTION: USES THEREOF
; FILE REFERENCE: 0575/62175
; CURRENT APPLICATION NUMBER: US/09/638,649
; CURRENT FILING DATE: 2000-08-14
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
;   LENGTH: 1348
;   TYPE: DNA
;   ORGANISM: Murine
US-09-638-649-6

Alignment Scores:
Pred. No.:                 39.9       Length:        1348
Score:                     46.00      Matches:       8
Percent Similarity:        100.00%    Conservative:  0
Best Local Similarity:     100.00%    Mismatches:    0
Query Match:               54.76%     Indels:        0
DB:                        4          Gaps:          0

US-08-978-217-12 (1-16) x US-09-638-649-6 (1-1348)

Qy    2 AsnSerSerGlyTrpLysGluGlu 9
        |||||||| ||||||||
Db  275 AATTCCAGTGGCTGGAAGGAGGAG 252

RESULT 7
US-09-554-337-4
; Sequence 4, Application US/09554337
; Patent No. 6475780
; GENERAL INFORMATION:
; APPLICANT: Parrington, Mark
; APPLICANT: Li, Xiaomao
; APPLICANT: Klein, Michel H.
; TITLE OF INVENTION: ALPHAVIRUS VECTORS FOR PARAMYXOVIRUS VACCINES
; FILE REFERENCE: 1038-1042 MIS
; CURRENT APPLICATION NUMBER: US/09/554,337
; CURRENT FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/065,791
; PRIOR FILING DATE: 1997-11-14
; PRIOR APPLICATION NUMBER: PCT/CA98/01064
; PRIOR FILING DATE: 1998-11-13
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
;   LENGTH: 8100
;   TYPE: DNA
;   ORGANISM: respiratory syncytial virus
US-09-554-337-4

Alignment Scores:
Pred. No.:                 335        Length:        8100
Score:                     46.00      Matches:       7
Percent Similarity:        85.71%     Conservative:  5
Best Local Similarity:     50.00%     Mismatches:    2
Query Match:               54.76%     Indels:        0
DB:                        4          Gaps:          0

US-08-978-217-12 (1-16) x US-09-554-337-4 (1-8100)

Qy    3 SerSerGlyTrpLysGlnLeuGlnSerArgAsn 16
        ||::::: |||||:: |||||||:|:||:|||||
Db  397 GCCACAAACTGGGCCGACGAGCAGGTGTTACAGGCCAGGAAC 438

RESULT 8
US-07-920-281C-1
; Sequence 1, Application US/07920281C
; Patent No. 5739026
```

GENERAL INFORMATION:
APPLICANT: Garoff, Henrik
APPLICANT: Liljestrom, Peter
TITLE OF INVENTION: DNA Expression Systems Based on
TITLE OF INVENTION: Alphaviruses
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: Birch, Stewart, Kolasch & Birch
STREET: P.O. Box 747
CITY: Falls Church
STATE: Virginia
COUNTRY: USA
ZIP: 22040-0747
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/920,281C
FILING DATE: 13-AUG-1992
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Murphy Jr., Gerald M.
REGISTRATION NUMBER: 28,977
REFERENCE/DOCKET NUMBER: 828-103P
TELECOMUNICATION INFORMATION:
TELEPHONE: 703-241-1300
TELEFAX: 703-241-2848
TELEX: 248345
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 11517 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: RNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Semliki Forest Virus
FEATURE:
NAME/KEY: -
LOCATION: 1..11517
OTHER INFORMATION: /label= genome
OTHER INFORMATION: /note= "Semliki Forest Virus complete nucleotide
OTHER INFORMATION: sequence, presented as a cloned DNA sequence; see
OTHER INFORMATION: Figure 5."
FEATURE:
NAME/KEY: CDS
LOCATION: 87..7379
OTHER INFORMATION: /product= "SFV polyprotein"
FEATURE:
NAME/KEY: CDS
LOCATION: 7421..11179
OTHER INFORMATION: /product= "SFV polyprotein"
US-07-920-281C-1

Alignment Scores:
Pred. No.:   509   Length: 11517
Score: 46.00   Matches: 7
Percent Similarity: 85.71%   Conservative: 5
Best Local Similarity: 50.00%   Mismatches: 2
Query Match: 54.76%   Indels: 0
DB: 1   Gaps: 0

US-08-978-217-12 (1-16) x US-07-920-281C-1 (1-11517)

Qy   3 SerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
        :::::: ||||||:||||||||||||:::||:||
Db 675 GCCACAAACTGGGCGCCGACCAGCAGGTGTTACAGGCCAGGAAC 716

RESULT 9

US-08-466-277-1
; Sequence 1, Application US/08466277
; Patent No. 6190666
GENERAL INFORMATION:
APPLICANT: Garoff, Henrik
APPLICANT: Liljestrom, Peter
TITLE OF INVENTION: DNA Expression Systems Based on
TITLE OF INVENTION: Alphaviruses
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: Birch, Stewart, Kolasch & Birch
STREET: P.O. Box 747
CITY: Falls Church
STATE: Virginia
COUNTRY: USA
ZIP: 22040-0747
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/466,277
FILING DATE: 06-Jun-1995
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/920,281
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Murphy Jr., Gerald M.
REGISTRATION NUMBER: 28,977
REFERENCE/DOCKET NUMBER: 828-103P
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-241-1300
TELEFAX: 703-241-2848
TELEX: 248345
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 11517 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: RNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Semliki Forest Virus
FEATURE:
NAME/KEY: -
LOCATION: 1..11517
OTHER INFORMATION: /label= genome
/note= "Semliki Forest Virus complete nucleotide
sequence, presented as a cloned DNA sequence; see
Figure 5."
FEATURE:
NAME/KEY: CDS
LOCATION: 87..7379
OTHER INFORMATION: /product= "SFV polyprotein"
FEATURE:
NAME/KEY: CDS
LOCATION: 7421..11179
OTHER INFORMATION: /product= "SFV polyprotein"
SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-08-466-277-1

Alignment Scores:
Pred. No.:   509   Length: 11517
Score: 46.00   Matches: 7
Percent Similarity: 85.71%   Conservative: 5
Best Local Similarity: 50.00%   Mismatches: 2
Query Match: 54.76%   Indels: 0
DB: 3   Gaps: 0

Query Match: 53.57%   Indels: 0
DB: 4   Gaps: 0

US-08-978-217-12 (1-16) x US-09-464-535-25 (1-993)

Qy   2 AsnSerSerGlyTrpLysGluGluValLeuGlnSerArg 15
          :::|||:::|||||||||||
Db 661 TCCAGAGCGCGGATGGCAATGATCAAGGTATTACAATCCAGG 620

RESULT 12
US-09-299-141-5/c
; Sequence 5, Application US/0929141
; Patent No. 6461606
; GENERAL INFORMATION:
; APPLICANT: FLOTTE, TERENCE R.
; APPLICANT: SONG, SIHONG
; APPLICANT: BYRNE, BARRY J.
; APPLICANT: MORGAN, MICHAEL
; TITLE OF INVENTION: MATERIALS AND METHODS FOR GENE THERAPY
; FILE REFERENCE: 4300.011800
; CURRENT APPLICATION NUMBER: US/09/299,141
; CURRENT FILING DATE: 1999-04-23
; EARLIER APPLICATION NUMBER: 60/083,025
; EARLIER FILING DATE: 1998-04-24
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 7492
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:p43C-AT-IN
US-09-299-141-5

Alignment Scores:
Pred. No.: 460
Score: 45.00
Percent Similarity: 61.90%
Best Local Similarity: 47.62%
Query Match: 53.57%
DB: 4

Length: 7492
Matches: 10
Conservative: 3
Mismatches: 2
Indels: 6
Gaps: 1

US-08-978-217-12 (1-16) x US-09-299-141-5 (1-7492)

Qy   2 AsnSerSerGlyTrp------------LysGluGluValLeuGlnSerArg 15
          :::|||||| ::::::
Db 813 AACAGCTCAGGCGTGGTTGAGCAACCTTACCTTAAAGAAGATGTAATTCACCAGAGCAAA 754

Qy   16 Asn 16
          |||
Db 753 AAC 751

RESULT 13
US-08-060-925A-12/c
; Sequence 12, Application US/08060925A
; Patent No. 5439824
; GENERAL INFORMATION:
; APPLICANT: Brantley, Mark
; APPLICANT: Laubach, Victor
; TITLE OF INVENTION: INCREASED EXPRESSION OF ALPHA-1
; TITLE OF INVENTION: ANTITRYPSIN IN EXPRESSION VECTORS THROUGH THE INCLUSION OF
; TITLE OF INVENTION: INTRON II
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: KNOBBE, MARTENS, OLSON AND BEAR
; STREET: 620 NEWPORT CENTER DRIVE SIXTEENTH FLOOR
; CITY: NEWPORT BEACH
; STATE: CA
; COUNTRY: USA
; ZIP: 92660
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible

US-08-978-217-12 (1-16) x US-08-466-277-1 (1-11517)

Qy   3 SerSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
          :::::|||:::||||||||
Db 675 GCCACAAACTGGGCCGACGAGCAGCAGGTGTTACAGGCCAGGAAC 716

RESULT 10
US-09-554-337-1
; Sequence 1, Application US/09554337
; Patent No. 647580
; GENERAL INFORMATION:
; APPLICANT: Parrington, Mark
; APPLICANT: Li, Xiaomao
; APPLICANT: Klein, Michel H.
; TITLE OF INVENTION: ALPHAVIRUS VECTORS FOR PARAMYXOVIRUS VACCINES
; FILE REFERENCE: 1038-1042 MIS
; CURRENT APPLICATION NUMBER: US/09/554,337
; CURRENT FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/065,791
; PRIOR FILING DATE: 1997-11-14
; PRIOR APPLICATION NUMBER: PCT/CA98/01064
; PRIOR FILING DATE: 1998-11-13
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 15538
; TYPE: DNA
; ORGANISM: respiratory syncytial virus
US-09-554-337-1

Alignment Scores:
Pred. No.: 727
Score: 46.00
Percent Similarity: 85.71%
Best Local Similarity: 50.00%
Query Match: 54.76%
DB: 4

US-08-978-217-12 (1-16) x US-09-554-337-1 (1-15538)

Qy   3 SerSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
          :::::|||:::||||||||
Db 3221 GCCACAAACTGGGCCGACGAGCAGCAGGTGTTACAGGCCAGGAAC 3262

Length: 15538
Matches: 7
Conservative: 5
Mismatches: 2
Indels: 0
Gaps: 0

RESULT 11
US-09-464-535-25/c
; Sequence 25, Application US/09464535
; Patent No. 6545200
; GENERAL INFORMATION:
; APPLICANT: Famodu, Omolayo O.
; APPLICANT: Cahoon, Rebecca E.
; APPLICANT: Sakai, Hajime
; APPLICANT: McGonigle, Brian
; APPLICANT: Rafalski, J. Antoni
; TITLE OF INVENTION: STEROL BIOSYNTHETIC ENZYMES
; FILE REFERENCE: BB1306 US NA
; CURRENT APPLICATION NUMBER: US/09/464,535
; CURRENT FILING DATE: 1999-12-15
; EARLIER APPLICATION NUMBER: 60/112,555
; EARLIER FILING DATE: 1998-12-16
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: Microsoft Office 97
; SEQ ID NO 25
; LENGTH: 993
; TYPE: DNA
; ORGANISM: Glycine max
US-09-464-535-25

Alignment Scores:
Pred. No.: 41.8
Score: 45.00
Percent Similarity: 78.57%
Best Local Similarity: 64.29%

Length: 993
Matches: 9
Conservative: 2
Mismatches: 3

```
        OPERATING SYSTEM: PC-DOS/MS-DOS
        SOFTWARE: Patentin Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
        APPLICATION NUMBER: US/08/060,925A
        FILING DATE: 06-MAY-1993
        CLASSIFICATION: 435
    ATTORNEY/AGENT INFORMATION:
        NAME: Fuller, Michael L.
        REGISTRATION NUMBER: 36,516
        REFERENCE/DOCKET NUMBER: NIH040.001A
    TELECOMMUNICATION INFORMATION:
        TELEPHONE: 619-235-8550
        TELEFAX: 619-235-0176
INFORMATION FOR SEQ ID NO: 12:
    SEQUENCE CHARACTERISTICS:
        LENGTH: 10627 base pairs
        TYPE: nucleic acid
        STRANDEDNESS: single
        TOPOLOGY: linear
        MOLECULE TYPE: cDNA
        HYPOTHETICAL: NO
        ANTI-SENSE: NO
US-08-060-925A-12

Alignment Scores:
Pred. No.:                  697          Length:         10627
Score:                      45.00        Matches:            10
Percent Similarity:         61.90%       Conservative:        3
Best Local Similarity:      47.62%       Mismatches:          2
Query Match:                53.57%       Indels:              6
DB:                                      Gaps:                1

US-08-978-217-12 (1-16) x US-08-060-925A-12 (1-10627)

Qy     2 AsnSerGlyTrp-----------LysGluGluValLeuGlnSerArg 15
         ||||||||||||            ::: ||||||:::|||||
Db  6394 AACAGCTCAGGCTGGTTGAGCAACCTTACCTTTAAAGAAGATGTAATTCACCAGAGCAAA 6335

Qy    16 Asn 16
         |||
Db  6334 AAC 6332

RESULT 14
US-09-668-680-8/c
; Sequence 8, Application US/09668680
; Patent No. 6436703
; GENERAL INFORMATION:
; APPLICANT: Tang, Y. Tom
; APPLICANT: Liu, Chenghua
; APPLICANT: Zhou, Ping
; APPLICANT: Asundi, Vinod
; APPLICANT: Zhang, Jie
; APPLICANT: Wang, Jian-Rui
; APPLICANT: Xue, Aidong J.
; APPLICANT: Xu, Chongjun
; APPLICANT: Drmanac, Radoje T.
; TITLE OF INVENTION: No. 6436703el Nucleic Acids and
; TITLE OF INVENTION: Polypeptides
; FILE REFERENCE: 790CIP2A
; CURRENT APPLICATION NUMBER: US/09/668,680
; CURRENT FILING DATE: 2000-09-22
; PRIOR APPLICATION NUMBER: 09/649,167
; PRIOR FILING DATE: 2000-08-23
; PRIOR APPLICATION NUMBER: 09/540,217
; PRIOR FILING DATE: 2000-03-31
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: pt_FL_genes Version 2.0
; SEQ ID NO 8
; LENGTH: 2763
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (180)..(1742)
US-09-668-680-8

Alignment Scores:
Pred. No.:                  212          Length:          2763
Score:                      44.00        Matches:             8
Percent Similarity:         66.67%       Conservative:        2
Best Local Similarity:      53.33%       Mismatches:          5
Query Match:                52.38%       Indels:              0
DB:                                      Gaps:                0

US-08-978-217-12 (1-16) x US-09-668-680-8 (1-2763)

Qy     2 AsnSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
         :::||||||||||        :::  |||||
Db  1342 TCCAGCTCTGGGGTGGAAGTCTTCCTCTTTGCCAGCTCTAGAAAC 1298

RESULT 15
US-09-668-680-6/c
; Sequence 6, Application US/09668680
; Patent No. 6436703
; GENERAL INFORMATION:
; APPLICANT: Tang, Y. Tom
; APPLICANT: Liu, Chenghua
; APPLICANT: Zhou, Ping
; APPLICANT: Asundi, Vinod
; APPLICANT: Zhang, Jie
; APPLICANT: Wang, Jian-Rui
; APPLICANT: Xue, Aidong J.
; APPLICANT: Xu, Chongjun
; APPLICANT: Drmanac, Radoje T.
; TITLE OF INVENTION: No. 6436703el Nucleic Acids and
; TITLE OF INVENTION: Polypeptides
; FILE REFERENCE: 790CIP2A
; CURRENT APPLICATION NUMBER: US/09/668,680
; CURRENT FILING DATE: 2000-09-22
; PRIOR APPLICATION NUMBER: 09/649,167
; PRIOR FILING DATE: 2000-08-23
; PRIOR APPLICATION NUMBER: 09/540,217
; PRIOR FILING DATE: 2000-03-31
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: pt_FL_genes Version 2.0
; SEQ ID NO 6
; LENGTH: 3396
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (27)..(2375)
US-09-668-680-6

Alignment Scores:
Pred. No.:                  271          Length:          3396
Score:                      44.00        Matches:             8
Percent Similarity:         66.67%       Conservative:        2
Best Local Similarity:      53.33%       Mismatches:          5
Query Match:                52.38%       Indels:              0
DB:                                      Gaps:                0

US-08-978-217-12 (1-16) x US-09-668-680-6 (1-3396)

Qy     2 AsnSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
         :::||||||||||        :::  |||||
Db  1975 TCCAGCTCTGGGGTGGAAGTCTTCCTCTTTGCCAGCTCTAGAAAC 1931

Search completed: February 12, 2004, 21:50:03
Job time : 9.03329 secs
```

OM protein - nucleic search, using frame_plus_p2n model

Copyright (c) 1993 - 2004   Compugen Ltd.
GenCore version 5.1.6

Run on: February 12, 2004, 19:34:21 ; Search time 21.1748 Seconds
                                (without alignments)
                       1750.959 Million cell updates/sec

Title: US-08-978-217-7
Perfect score: 445
Sequence: 1 NCALEELRLVFGPLGDQLHA........ELLDDGQQASPYHPGSCGAG 84

Scoring table: BLOSUM62
  Xgapop 10.0 , Xgapext 0.5
  Ygapop 10.0 , Ygapext 0.5
  Fgapop 6.0 , Fgapext 7.0
  Delop   6.0 , Delext 7.0

Searched: 569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters: 1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                  Maximum Match 100%
                  Listing first 45 summaries

Command line parameters: -DEV=xlh
-MODEL=frame+_p2n.model
-Q=/cgn2_1/USPTO_spool/US08978217/runat_10022004_133826_20481/app_query.fasta_1.1500
-DB=Issued_PatenIs_NA -QFMT=fastap -SUFFIX=rni -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15
-MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-USER=US08978217 @CGN_1_115 @runat_10022004_133826_20481 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Issued_Patents_NA:*
  1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
  2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
  3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
  4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
  5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
  6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	445	100.0	1907	4	US-09-300-958A-27	Sequence 27, Appl
2	445	100.0	1907	4	US-09-570-593-4	Sequence 4, Appli
3	445	100.0	1920	1	US-08-746-789A-1	Sequence 1, Appli
4	73.5	16.5	624	4	US-09-252-991A-13629	Sequence 13629, A
5	73.5	16.5	801	4	US-09-404-879A-13819	Sequence 13819, A
c 6	72	16.2	521	4	US-09-252-991A-13819	Sequence 139, App
c 7	72	16.2	521	4	US-09-404-879A-139	Sequence 139, App
c 8	72	16.2	521	4	US-09-338-933-139	Sequence 139, App
c 9	72	16.2	551	4	US-09-215-681-139	Sequence 139, App
c 10	72	16.2	551	4	US-09-338-933-92	Sequence 92, Appl
c 11	72	16.2	551	4	US-09-215-681-92	Sequence 92, Appl
c 12	72	16.2	555	4	US-09-404-879A-107	Sequence 107, App
c 13	72	16.2	555	4	US-09-338-933-107	Sequence 107, App
c 14	72	16.2	555	4	US-09-215-681-107	Sequence 107, App
c 15	72	16.2	2301	1	US-08-306-691B-23	Sequence 23, Appl
c 16	72	16.2	2301	4	US-09-167-206-3	Sequence 3, Appli
c 17	72	16.2	2301	5	PCT-US93-06251-78	Sequence 78, Appli
18	71.5	16.1	3141	2	US-08-956-242-1	Sequence 1, Appli
19	71.5	16.1	3141	3	US-09-51-215-1	Sequence 1, Appli
c 20	67.5	15.2	1011	4	US-09-252-991A-7550	Sequence 7550, Ap
21	67.5	15.2	1062	4	US-09-252-991A-7788	Sequence 7788, Ap
22	66.5	14.9	534	4	US-09-252-991A-12113	Sequence 12113, A
23	66.5	14.9	624	4	US-09-252-991A-12252	Sequence 12252, A
c 24	66.5	14.9	849	4	US-09-252-991A-11100	Sequence 11100, A
c 25	66.5	14.9	852	4	US-09-252-991A-10964	Sequence 10964, A
c 26	66.5	14.9	1473	4	US-09-518-914-7	Sequence 7, Appli
c 27	66	14.8	1594	2	US-08-955-713-1	Sequence 1, Appli
c 28	66	14.8	4154	4	US-08-131-365B-37	Sequence 37, Appl
29	66	14.8	4154	2	US-08-668-123-37	Sequence 37, Appl
30	65.5	14.7	444	4	US-09-252-991A-7864	Sequence 7864, Ap
c 31	65.5	14.7	111282	4	US-09-754-250-3	Sequence 3, Appli
32	64.5	14.5	576	4	US-09-252-991A-7380	Sequence 7380, Ap
c 33	64.5	14.5	756	4	US-09-252-991A-7245	Sequence 7245, Ap
c 34	64.5	14.5	915	4	US-09-252-991A-7455	Sequence 7455, Ap
35	64.5	14.5	3546	1	US-08-162-809-9	Sequence 9, Appli
36	64.5	14.5	3591	1	US-08-162-809-13	Sequence 13, Appl
c 37	64.5	14.5	3807	1	US-08-357-598-1	Sequence 1, Appli
c 38	64.5	14.5	3807	1	US-09-003-289-1	Sequence 1, Appli
c 39	64.5	14.5	3807	5	PCT-US95-16435-1	Sequence 1, Appli
40	64	14.4	3805	2	US-09-220-132-9	Sequence 9, Appli
41	64	14.4	32207	2	US-08-770-379-20	Sequence 20, Appl
42	64	14.4	32207	3	US-09-757-669A-20	Sequence 20, Appl
43	64	14.4	32207	4	US-09-230-371A-20	Sequence 20, Appl
44	63.5	14.3	1575	4	US-09-134-001C-516	Sequence 516, App
45	63.5	14.3	3103	4	US-09-268-480-10	Sequence 10, Appl

ALIGNMENTS

RESULT 1
US-09-300-958A-27
; Sequence 27, Application US/09300958A
; Patent No. 6495319
; GENERAL INFORMATION:
; APPLICANT: McClelland, Michael
; APPLICANT: Welsh, John
; APPLICANT: Trenkle, Thomas
; TITLE OF INVENTION: Reduced Complexity Nucleic Acid Targets and Methods of
; TITLE OF INVENTION: Using Same
; FILE REFERENCE: P-PH 3457
; CURRENT APPLICATION NUMBER: US/09/300,958A
; CURRENT FILING DATE: 1999-04-27
; PRIOR APPLICATION NUMBER: 60/083,331
; PRIOR FILING DATE: 1998-04-27
; PRIOR APPLICATION NUMBER: 60/098,070
; PRIOR FILING DATE: 1998-08-27
; PRIOR APPLICATION NUMBER: 60/118,624
; PRIOR FILING DATE: 1999-02-04
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 27
;   LENGTH: 1907
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-300-958A-27

Alignment Scores:
Pred. No.:   9.25e-51   Length: 1907
Score: 445.00   Matches: 84
Percent Similarity: 100.00%   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 4   Indels: 0
DB: Gaps: 0

US-08-978-217-7 (1-84) x US-09-300-958A-27 (1-1907)

Qy   1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   405 AATTGTGCCCTTGAGGAGCTGCGTCGTCTTGGGCCTCTGGGGGACCAACTCCATGCC 464

Qy   21 GlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   465 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTGAGCTGGATCATTGAGCTGCTG 524

Qy   41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   525 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 584

Qy   61 ProPheAlaGlnGluLeuLeuAspAspGlyGlyGlnAlaSerProTyrHisProGlySer 80
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   585 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAGCCAGCCCCTACCACCCCGGCAGC 644

Qy   81 CysGlyAlaGly 84
            ||||||||||||
Db   645 TGTGGCGCAGGA 656

RESULT 2
US-09-570-593-4
; Sequence 4, Application US/09570593
; Patent No. 6566063
; GENERAL INFORMATION:
;   APPLICANT: Kaufmann, Joerg
;   APPLICANT: Xin, Hong
;   APPLICANT: Harrowe, Greg
;   TITLE OF INVENTION: EXPRESSION OF ETS-DOMAIN PROTEINS IN
;   TITLE OF INVENTION: CANCER
;   FILE REFERENCE: 2300-1556
;   CURRENT APPLICATION NUMBER: US/09/570,593
;   CURRENT FILING DATE: 2000-05-12
;   PRIOR APPLICATION NUMBER: 60/134,112
;   PRIOR FILING DATE: 1999-05-14
;   NUMBER OF SEQ ID NOS: 13
;   SOFTWARE: FastSEQ for Windows Version 4.0
;
;   SEQ ID NO 4
;   LENGTH: 1907
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (96)...(1211)
;   OTHER INFORMATION: Human epithelial-restricted with serine box (ESX)
;   OTHER INFORMATION: protein.
US-09-570-593-4

Alignment Scores:
Pred. No.:   Length: 1907
Score: 9.25e-51   Matches: 84
Percent Similarity: 445.00   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 100.00%   Indels: 0
DB: Gaps: 0

US-08-978-217-7 (1-84) x US-09-570-593-4 (1-1907)

Qy   1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   405 AATTGTGCCCTTGAGGAGCTGCGTCGTCTTGGGCCTCTGGGGGACCAACTCCATGCC 464

Qy   21 GlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   465 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTGAGCTGGATCATTGAGCTGCTG 524

Qy   41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   525 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 584

Qy   61 ProPheAlaGlnGluLeuLeuAspAspGlyGlyGlnAlaSerProTyrHisProGlySer 80
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db   585 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAGCCAGCCCCTACCACCCCGGCAGC 644

Qy   81 CysGlyAlaGly 84
            ||||||||||||
Db   645 TGTGGCGCAGGA 656

RESULT 3
US-08-746-789A-1
; Sequence 1, Application US/08746789A
; Patent No. 5789200
; GENERAL INFORMATION:
;   APPLICANT: Ismail Kola, Martin J. Tymms, Christine DeBouck
;   TITLE OF INVENTION: A No. 5789200el Human ETS Family Member, ELF3
;   NUMBER OF SEQUENCES: 4
;   CORRESPONDENCE ADDRESS:
;   ADDRESSEE: SmithKline Beecham Corporation
;   STREET: 709 Swedeland Road, P.O. Box 1539
;   CITY: King of Prussia
;   STATE: PA
;   COUNTRY: USA
;   ZIP: 19406-0939
;   COMPUTER READABLE FORM:
;   MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
;   COMPUTER: IBM 486
;   OPERATING SYSTEM: WINDOWS FOR WORKGROUPS
;   SOFTWARE: MICROSOFT WORD
;   CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/08/746,789A
;   FILING DATE: No. 5789200ember 15, 1996
;   CLASSIFICATION: 514
;   PRIOR APPLICATION DATA:
;   APPLICATION NUMBER:
;   FILING DATE:
;   ATTORNEY/AGENT INFORMATION:
;   NAME: William T. Han
;   REGISTRATION NUMBER: 34,344
;   REFERENCE/DOCKET NUMBER: ATG 50024
;   TELECOMMUNICATION INFORMATION:
;   TELEPHONE: 610 270 5219
;   TELEFAX: 610 270 4026
; INFORMATION FOR SEQ ID NO: 1:
;   SEQUENCE CHARACTERISTICS:
;   LENGTH: 1920
;   TYPE: Nucleic Acid
;   STRANDEDNESS: Single
;   TOPOLOGY: Linear
;   ANTI-SENSE: No
US-08-746-789A-1

Alignment Scores:
Pred. No.:   Length: 1920
Score: 9.33e-51   Matches: 84
Percent Similarity: 445.00   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 100.00%   Indels: 0
DB: Gaps: 0

US-08-746-789A-1

US-08-978-217-7 (1-84) x US-08-746-789A-1 (1-1920)

Qy   1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   424 AATTGTGCCCTTGAGGAGCTGCGTCGTCTTGGGGGTCCTCTGGGGGACCAACTCCATGCC 483

Qy   21 GlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   484 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTGAGCTGGATCATTGAGCTGCTG 543

Qy   41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   544 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 603

Qy   61 ProPheAlaGlnGluLeuLeuAspAspGlyGlyGlnAlaSerProTyrHisProGlySer 80
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db   604 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 663

Qy   81 CysGlyAlaGly 84
         |||||||||
Db   664 TGTGGCGCAGGA 675

RESULT 4
US-09-252-991A-13629/c
; Sequence 13629, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 13629
; LENGTH: 624
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-13629

Alignment Scores:
Pred. No.:   0.486   Length: 624
Score: 73.50   Matches: 26
Percent Similarity: 47.95%   Conservative: 9
Best Local Similarity: 35.62%   Mismatches: 19
Query Match: 16.52%   Indels: 19
DB: 4   Gaps: 4

US-08-978-217-7 (1-84) x US-09-252-991A-13629 (1-624)

Qy   12 GlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerSerSerAsp 31
         ||||||||||||||| ::: ||| ||||||
Db   165 GGAGTACTTGCCGATCAGTTGCATGCCCGTCGCCCGGCCTT--------------- 124

Qy   32 GluLeuSerTrpIleIleGluLeuGluLysAspGlyMetAlaPheGlnEluAlaLeu 51
         |||:::   ::::::   ::: || |||||||
Db   123 CATCTCGCAGGCCTTGTG---GTCCAGCAGCATGAGCGTCCTGCGCCTCCAGGGCCGCCTC 67

Qy   52 AspProGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGln 71
         ||||||| :::|||||||||:::
Db   66 GACCCAGGC---------GGCGGGAGTGGAACAGGCAAGGAATTGGTCGATCTCGGGCAA 16

Qy   72 GlnAlaSerProTyrHisProGlySerCysGlyAlaGly 84
         |||||||
Db   15 CAT---------------------------GGTGCAGGT 4

RESULT 5
US-09-252-991A-13819
; Sequence 13819, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 13819
; LENGTH: 801
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-13819

Alignment Scores:
Pred. No.:   0.679   Length: 801
Score: 73.50   Matches: 26
Percent Similarity: 47.95%   Conservative: 9
Best Local Similarity: 35.62%   Mismatches: 19
Query Match: 16.52%   Indels: 19
DB: 4   Gaps: 4

US-08-978-217-7 (1-84) x US-09-252-991A-13819 (1-801)

Qy   12 GlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerSerSerAsp 31
         ||||||||||||||| ::: ||| ||||||
Db   508 GGAGTACTTGCCGATCAGTTGCATGCCCGTCGCCGGCCTT--------------- 549

Qy   32 GluLeuSerTrpIleIleGluLeuGluLysAspGlyMetAlaPheGlnEluAlaLeu 51
         |||:::   ::::::   ::: || |||||||
Db   550 CATCTCGCAGGCCTTGTG---GTCCAGCAGCATGAGCGTCCTGCGCCTCCAGGGCCCGCCTC 606

Qy   52 AspProGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGln 71
         ||||||| :::|||||||||:::
Db   607 GACCCAGGC---------GGCGGGAGTGGAACAGGCAAGGAATTGGTCGATCTCGGGCAA 657

Qy   72 GlnAlaSerProTyrHisProGlySerCysGlyAlaGly 84
         |||||||
Db   658 CAT---------------------------GGTGCAGGT 669

RESULT 6
US-09-404-879A-139/c
; Sequence 139, Application US/09404879A
; Patent No. 6468546
; GENERAL INFORMATION:
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: King, Gordon E.
; APPLICANT: Algate, Paul A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF OVARIAN CANCER
; FILE REFERENCE: 210121.462C2
; CURRENT APPLICATION NUMBER: US/09/404,879A
; CURRENT FILING DATE: 1999-09-24
; NUMBER OF SEQ ID NOS: 393
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 139
; LENGTH: 521
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(521)
; OTHER INFORMATION: n = A,T,C or G
US-09-404-879A-139

Alignment Scores:
Pred. No.:   0.61   Length: 521
Score: 72.00   Matches: 31
Percent Similarity: 39.81%   Conservative: 10
Best Local Similarity: 30.10%   Mismatches: 32
Query Match: 16.18%   Indels: 31
DB: 5   Gaps: 5

US-08-978-217-7 (1-84) x US-09-404-879A-139 (1-521)

Qy   6 GluLeuArgLeuValPhe--------GlyProLeuGlyAspGlnLeuHisAlaGlnLeu 22
         ||||||| ---|||||||
Db   333 GAGTTCCATCTTTCTTCATCTTTCATCTTTTAAGGCCCGGTTTTCAATAACCTTCATACCTCTCTC 274

Qy   23 ArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuGluLeuGluLys 42
         :::::||| ||| :::
Db   273 ACTCTCATCAGCAGCTTTTTCAGC---------------TTCTTCCAGCTTTTGCAGGGC 229

Qy   43 AspGlyMetAla--------------------------PheGlnGluAlaLeuAspProGly--- 54

Db   228 AGTGGCCAGGCGCTCCTGAGCACGGTCCAGCTCTTCTTCAACCAGCTGGATCCTACGGTT 169
                  |||||||||||
Qy   55 ----------------------------ProPheAspGlnGlySerProPheAlaGlnGluLeuLeu 67
                  ||||||| ::::||||||
Db   168 CAAGGAGGGCCACCTCAGCCTCAGCCTGTTCCCGGGCCGCCTTTCTCCCT-CAACTTCTC 110

Qy   68 AspAspGlyGlnGlnAlaSerProTyrHis--------------------ProGlySer 80
                  ||||||| :::||||||
Db   109 GCTGGAGGCGGCTCAGCTCGCTCCTCTGCATCATCTGCCTGCTGCTGCAGAACCTGGATCT 50

Qy   81 CysGlyAla 83
                  ||| :::
Db   49 TGCGCTTCA 41

RESULT 7
US-09-338-933-139/c
; Sequence 139, Application US/09338933
; Patent No. 6488931
; GENERAL INFORMATION:
; APPLICANT: Mitcham, Jennifer Lynn
; APPLICANT: King, Gordon E.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY OF
; TITLE OF INVENTION: OVARIAN CANCER
; FILE REFERENCE: 210121.462c1
; CURRENT APPLICATION NUMBER: US/09/338,933
; CURRENT FILING DATE: 1999-06-23
; NUMBER OF SEQ ID NOS: 312
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 139
; LENGTH: 521
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(521)
; OTHER INFORMATION: n = A,T,C or G
US-09-338-933-139

Alignment Scores:
Pred. No.:   0.61   Length: 521
Score: 72.00   Matches: 31
Percent Similarity: 39.81%   Conservative: 10
Best Local Similarity: 30.10%   Mismatches: 32
Query Match: 16.18%   Indels: 31
DB: 4   Gaps: 5

US-08-978-217-7 (1-84) x US-09-338-933-139 (1-521)

Qy   6 GluLeuArgLeuValPhe---------GlyProLeuGlyAspGlnLeuHisAlaGlnLeu 22
                  |||| ::: ||||||
Db   333 GAGTTCCATCTTTCTTCATCTTTAAGGCCCGGTTTTCAATAACCTTCATACCTCTCTC 274

Qy   23 ArgAspLeuThrSerSerSerAspSerSerSerTrpIleIleGluLeuLeuGluLys 42
                  :::||||||||||
Db   273 ACTCTCATCAGCAGCTTTTCAGC-----------TTCTTCCAGCTTTTGCAGGGC 229

Qy   43 AspGlyMetAla----------------PheGlnGluAlaLeuAspProGly--- 54
                  |||||||
Db   228 AGTGGCCAGGCGCTCCTGAGCACGGTCCAGCTCTTCTTCAACCAGCTGGATCCTACGGTT 169

Qy   55 ----------------------------ProPheAspGlnGlySerProPheAlaGlnGluLeuLeu 67
                  ||||||| ::::||||||
Db   168 CAAGGAGGGCCACCTCAGCCTCAGCCTGTTCCCGGGCCGCCTTTCTCCCT-CAACTTCTC 110

Qy   68 AspAspGlyGlnGlnAlaSerProTyrHis--------------------ProGlySer 80
                  ||||||| :::||||||
Db   109 GCTGGAGGCGGCTCAGCTCGCTCCTCTGCATCATCTGCCTGCTGCTGCAGAACCTGGATCT 50

Qy   81 CysGlyAla 83
                  ||| :::
Db   49 TGCGCTTCA 41

RESULT 8
US-09-215-681-139/c
; Sequence 139, Application US/09215681A
; Patent No. 6528853
; GENERAL INFORMATION:
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Frudakis, Tony N.
; APPLICANT: King, Gordon E.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSIS
; TITLE OF INVENTION: OF OVARIAN CANCER
; FILE REFERENCE: 210121.463
; CURRENT APPLICATION NUMBER: US/09/215,681A
; CURRENT FILING DATE: 1998-12-17
; NUMBER OF SEQ ID NOS: 310
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 139
; LENGTH: 521
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(521)
; OTHER INFORMATION: n = A,T,C or G
US-09-215-681-139

Alignment Scores:
Pred. No.:   0.61   Length: 521
Score: 72.00   Matches: 31
Percent Similarity: 39.81%   Conservative: 10
Best Local Similarity: 30.10%   Mismatches: 32
Query Match: 16.18%   Indels: 31
DB: 4   Gaps: 5

US-08-978-217-7 (1-84) x US-09-215-681-139 (1-521)

Qy   6 GluLeuArgLeuValPhe---------GlyProLeuGlyAspGlnLeuHisAlaGlnLeu 22
                  |||| ::: ||||||
Db   333 GAGTTCCATCTTTCTTCATCTTTAAGGCCCGGTTTTCAATAACCTTCATACCTCTCTC 274

Qy   23 ArgAspLeuThrSerSerSerAspSerSerSerTrpIleIleGluLeuLeuGluLys 42
                  :::||||||||||
Db   273 ACTCTCATCAGCAGCTTTTCAGC-----------TTCTTCCAGCTTTTGCAGGGC 229

Qy   43 AspGlyMetAla----------------PheGlnGluAlaLeuAspProGly--- 54
                  |||||||
Db   228 AGTGGCCAGGCGCTCCTGAGCACGGTCCAGCTCTTCTTCAACCAGCTGGATCCTACGGTT 169

Qy   55 ----------------------------ProPheAspGlnGlySerProPheAlaGlnGluLeuLeu 67
                  ||||||| :::||||||
Db   168 CAAGGAGGGCCACCTCAGCCTCAGCCTGTTCCCGGGCCGCCTTTCTCCCT-CAACTTCTC 110

Qy   68 AspAspGlyGlnGlnAlaSerProTyrHis--------------------ProGlySer 80
                  ||||||| :::||||||
Db   109 GCTGGAGGCGGCTCAGCTCGCTCCTCTGCATCATCTGCCTGCTGCTGCAGAACCTGGATCT 50

Qy   81 CysGlyAla 83
                  ||| :::
Db   49 TGCGCTTCA 41

RESULT 9
US-09-404-879A-92/c
; Sequence 92, Application US/09404879A
; Patent No. 6468546
; GENERAL INFORMATION:
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: King, Gordon E.
; APPLICANT: Algate, Paul A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF OVARIAN CANCER
; FILE REFERENCE: 210121.462C2
; CURRENT APPLICATION NUMBER: US/09/404,879A
; CURRENT FILING DATE: 1999-09-24
; NUMBER OF SEQ ID NOS: 393

```
; SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 92
; LENGTH: 551
; TYPE: DNA
; ORGANISM: Homo sapien
US-09-404-879A-92

Alignment Scores:
Pred. No.:             0.657        Length:        551
Score:                 72.00        Matches:       31
Percent Similarity:    39.81%       Conservative:  10
Best Local Similarity: 30.10%       Mismatches:    32
Query Match:           16.18%       Indels:        31
DB:                    4            Gaps:          5

US-08-978-217-7 (1-84) x US-09-404-879A-92 (1-551)

Qy    6 GluLeuArgLeuValPhe-------GlyProLeuGlyAspGlnLeuHisAlaGlnLeu 22
          |||    |||||               :::  ||||||
Db  354 GAGTTCCATCTTTTCTTCATCTTTTTAAGGCCGGTTTTCAATAACCTTCATACCTCTCTC 295

Qy   23 ArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLys 42
                                  :::::||||||             :::
Db  294 ACTCTCATCAGCAGCTTTTTCAGC----------TTCTTCCAGCTTTTGCAGGGC 250

Qy   43 AspGlyMetAla-------------------------PheGlnGluAlaLeuAspProGly--- 54
                                              |||||
Db  249 AGTGGCCAGGGCGCTCCTGAGCACGGTCCAGCTCTTCTTCAACCAGCTGGATCCTACGGTT 190

Qy   55 -------------------ProPheAspGlnGlySerProPheAlaGlnLeuLeuLeu 67
                          ||||||||::  .:::||||||||
Db  189 CAAGGAGGCCACCTCAGCCTGTTCCCGGGCGCCCGCCTTTCTCCCT-CAACTTCTC 131

Qy   68 AspAspGlyGlnGlnAlaSerProTyrHis---------------ProGlySer 80
               |||||||  ::  |||
Db  130 GCTGGAGGCGGCTCAGCTCGCTCCTCCTGCATCATCTGCCTGCTGCGAGAACCTGGATCT 71

Qy   81 CysGlyAla 83
          :::  |||
Db   70 TGCGCTTCA 62

RESULT 10
US-09-338-933-92/c
; Sequence 92, Application US/09338933
; Patent No. 6488931
; GENERAL INFORMATION:
; APPLICANT: Mitcham, Jennifer Lynn
; APPLICANT: King, Gordon E.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY OF
;   OVARIAN CANCER
; FILE REFERENCE: 210121.462C1
; CURRENT APPLICATION NUMBER: US/09/338,933
; CURRENT FILING DATE: 1999-06-23
; NUMBER OF SEQ ID NOS: 312
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 92
; LENGTH: 551
; TYPE: DNA
; ORGANISM: Homo sapien
US-09-338-933-92

Alignment Scores:
Pred. No.:             0.657        Length:        551
Score:                 72.00        Matches:       31
Percent Similarity:    39.81%       Conservative:  10
Best Local Similarity: 30.10%       Mismatches:    32
Query Match:           16.18%       Indels:        31
DB:                    4            Gaps:          5

US-08-978-217-7 (1-84) x US-09-338-933-92 (1-551)

Qy    6 GluLeuArgLeuValPhe-------GlyProLeuGlyAspGlnLeuHisAlaGlnLeu 22
          |||    |||||
```

```
Db  354 GAGTTCCATCTTTTCTTCATCTTTTTAAGGCCGGTTTTCAATAACCTTCATACCTCTCTC 295

Qy   23 ArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLys 42
                                  :::::||||||
Db  294 ACTCTCATCAGCAGCTTTTTCAGC----------TTCTTCCAGCTTTTGCAGGGC 250

Qy   43 AspGlyMetAla-------------------------PheGlnGluAlaLeuAspProGly--- 54
                                              |||||
Db  249 AGTGGCCAGGGCGCTCCTGAGCACGGTCCAGCTCTTCTTCAACCAGCTGGATCCTACGGTT 190

Qy   55 -------------------ProPheAspGlnGlySerProPheAlaGlnLeuLeuLeu 67
                          ||||||||::  .:::||||||||
Db  189 CAAGGAGGCCACCTCAGCCTGTTCCCGGGCGCCCGCCTTTCTCCCT-CAACTTCTC 131

Qy   68 AspAspGlyGlnGlnAlaSerProTyrHis---------------ProGlySer 80
               |||||||  ::  |||
Db  130 GCTGGAGGCGGCTCAGCTCGCTCCTCCTGCATCATCTGCCTGCTGCGAGAACCTGGATCT 71

Qy   81 CysGlyAla 83
          :::  |||
Db   70 TGCGCTTCA 62

RESULT 11
US-09-215-681-92/c
; Sequence 92, Application US/09215681A
; Patent No. 6528253
; GENERAL INFORMATION:
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Frudakis, Tony N.
; APPLICANT: King, Gordon E.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSIS
; TITLE OF INVENTION: OF OVARIAN CANCER
; FILE REFERENCE: 210121.463
; CURRENT APPLICATION NUMBER: US/09/215,681A
; CURRENT FILING DATE: 1998-12-17
; NUMBER OF SEQ ID NOS: 310
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 92
; LENGTH: 551
; TYPE: DNA
; ORGANISM: Homo sapien
US-09-215-681-92

Alignment Scores:
Pred. No.:             0.657        Length:        551
Score:                 72.00        Matches:       31
Percent Similarity:    39.81%       Conservative:  10
Best Local Similarity: 30.10%       Mismatches:    32
Query Match:           16.18%       Indels:        31
DB:                    4            Gaps:          5

US-08-978-217-7 (1-84) x US-09-215-681-92 (1-551)

Qy    6 GluLeuArgLeuValPhe-------GlyProLeuGlyAspGlnLeuHisAlaGlnLeu 22
          |||    |||||                   ||||||
Db  354 GAGTTCCATCTTTTCTTCATCTTTTTAAGGCCGGTTTTCAATAACCTTCATACCTCTCTC 295

Qy   23 ArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLys 42
                                  :::::||||||
Db  294 ACTCTCATCAGCAGCTTTTTCAGC----------TTCTTCCAGCTTTTGCAGGGC 250

Qy   43 AspGlyMetAla-------------------------PheGlnGluAlaLeuAspProGly--- 54
                                              |||||
Db  249 AGTGGCCAGGGCGCTCCTGAGCACGGTCCAGCTCTTCTTCAACCAGCTGGATCCTACGGTT 190

Qy   55 -------------------ProPheAspGlnGlySerProPheAlaGlnLeuLeuLeu 67
                          ||||||||::  .:::||||||||
Db  189 CAAGGAGGCCACCTCAGCCTGTTCCCGGGCGCCCGCCTTTCTCCCT-CAACTTCTC 131

Qy   68 AspAspGlyGlnGlnAlaSerProTyrHis---------------ProGlySer 80
               |||||||  ::  |||
Db  130 GCTGGAGGCGGCTCAGCTCGCTCCTCCTGCATCATCTGCCTGCTGCGAGAACCTGGATCT 71

Qy   81 CysGlyAla 83
          :::  |||
Db   70 TGCGCTTCA 62
```

RESULT 12

Qy   81 CysGlyAla 83
           :::
Db   70 TGCGCTTCA 62

US-09-404-879A-107/c
; Sequence 107, Application US/09404879A
; Patent No. 6468546
; GENERAL INFORMATION:
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: King, Gordon E.
; APPLICANT: Algate, Paul A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF OVARIAN CANCER
; FILE REFERENCE: 210121.462C2
; CURRENT APPLICATION NUMBER: US/09/404,879A
; CURRENT FILING DATE: 1999-09-24
; NUMBER OF SEQ ID NOS: 393
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 107
; LENGTH: 555
; TYPE: DNA
; ORGANISM: Homo sapien
US-09-404-879A-107

Alignment Scores:
Pred. No.:   0.663   Length: 555
Score: 72.00   Matches: 31
Percent Similarity: 39.81%   Conservative: 10
Best Local Similarity: 30.10%   Mismatches: 32
Query Match: 16.18%   Indels: 31
DB: 4   Gaps: 5

US-08-978-217-7 (1-84) x US-09-404-879A-107 (1-555)

Qy   6 GluLeuArgLeuValPhe--------GlyProLeuGlyAspGlnLeuHisAlaGlnLeu 22
                  ||| || |::: ::: ||||||
Db 358 GAGTTCCATCTTTCTTCCATCTTTTAAGGCCCGGTTTCAATAACCTTCATACCTCTC 299

Qy   23 ArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuGluLys 42
                  :::::||||:::   --TTCTTCCAGCTTTTGCAGGGC 254
Db 298 ACTCTCATCAGCAGCTTTTTCAGC

Qy   43 AspGlyMetAla--------------------PheGlnGluAlaLeuAspProGly-- 54
                  ||| |||||||
Db 253 AGTGGCCAGGCGCTCCTGAGCACGGTCCAGCTCTTCAACCAGCTGGATCCAACTTCTC 194

Qy   55 --------------ProPheAspGlnGlySerProPheAlaGlnLeuLeuLeu 67
                                 ||||||||
Db 193 CAAGGAGGCCACCTCAGCCTGTTCCCGGGCCCGCCTTTCTCCCT-CAACTTCTC 135

Qy   68 AspAspGlyGlnGlnAlaSerProTyrHis------------ProGlySer 80
                  ::: ||| ||||| ||||||
Db 134 GCTGGAGGCGCTCAGCTGCCTCCTGCATCATCTGCTGCTGCAGAACCTGGATCT 75

Qy   81 CysGlyAla 83
           :::
Db   74 TGCGCTTCA 66

RESULT 13

US-09-338-933-107/c
; Sequence 107, Application US/09338933
; Patent No. 6488931
; GENERAL INFORMATION:
; APPLICANT: Mitcham, Jennifer Lynn
; APPLICANT: King, Gordon E.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY OF
; TITLE OF INVENTION: OVARIAN CANCER
; FILE REFERENCE: 210121.462C1
; CURRENT APPLICATION NUMBER: US/09/338,933
; CURRENT FILING DATE: 1999-06-23
; NUMBER OF SEQ ID NOS: 312
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 107
; LENGTH: 555
; TYPE: DNA
; ORGANISM: Homo sapien
US-09-338-933-107

Alignment Scores:
Pred. No.:   0.663   Length: 555
Score: 72.00   Matches: 31
Percent Similarity: 39.81%   Conservative: 10
Best Local Similarity: 30.10%   Mismatches: 32
Query Match: 16.18%   Indels: 31
DB: 4   Gaps: 5

US-08-978-217-7 (1-84) x US-09-338-933-107 (1-555)

Qy   6 GluLeuArgLeuValPhe--------GlyProLeuGlyAspGlnLeuHisAlaGlnLeu 22
                  ||| || |::: ::: ||||||
Db 358 GAGTTCCATCTTTCTTCATCTTTTAAGGCCCGGTTTCAATAACCTTCATACCTCTC 299

Qy   23 ArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuGluLys 42
                  :::::||||:::   --TTCTTCCAGCTTTTGCAGGGC 254
Db 298 ACTCTCATCAGCAGCTTTTTCAGC

Qy   43 AspGlyMetAla--------------------PheGlnGluAlaLeuAspProGly-- 54
                  ||| |||||||
Db 253 AGTGGCCAGGCGCTCCTGAGCACGGTCCAGCTCTTCAACCAGCTGGATCCAACTTCTC 194

Qy   55 --------------ProPheAspGlnGlySerProPheAlaGlnLeuLeuLeu 67
                                 ||||||||
Db 193 CAAGGAGGCCACCTCAGCCTGTTCCCGGGCCCGCCTTTCTCCCT-CAACTTCTC 135

Qy   68 AspAspGlyGlnGlnAlaSerProTyrHis------------ProGlySer 80
                  ::: ||| ||||| ||||||
Db 134 GCTGGAGGCGCTCAGCTGCCTCCTGCATCATCTGCTGCTGCAGAACCTGGATCT 75

Qy   81 CysGlyAla 83
           :::
Db   74 TGCGCTTCA 66

RESULT 14

US-09-215-681-107/c
; Sequence 107, Application US/09215681A
; Patent No. 6528253
; GENERAL INFORMATION:
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Frudakis, Tony N.
; APPLICANT: King, Gordon E.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSIS
; TITLE OF INVENTION: OF OVARIAN CANCER
; FILE REFERENCE: 210121.463
; CURRENT APPLICATION NUMBER: US/09/215,681A
; CURRENT FILING DATE: 1998-12-17
; NUMBER OF SEQ ID NOS: 310
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 107
; LENGTH: 555
; TYPE: DNA
; ORGANISM: Homo sapien
US-09-215-681-107

Alignment Scores:
Pred. No.:   0.663   Length: 555
Score: 72.00   Matches: 31
Percent Similarity: 39.81%   Conservative: 10
Best Local Similarity: 30.10%   Mismatches: 32
Query Match: 16.18%   Indels: 31
DB: 4   Gaps: 5

US-08-978-217-7 (1-84) x US-09-215-681-107 (1-555)

Qy   6 GluLeuArgLeuValPhe--------GlyProLeuGlyAspGlnLeuHisAlaGlnLeu 22
                  ||| || |::: ::: ||||||

```
Db  358 GAGTTCCATCTTTTCTTCATCTTTTAAGGGCCGGTTTCAATAACCTTCATACCTCTCTC 299
Qy   23 ArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluGluLys 42
         :::||||||||            |||
Db  298 ACTCTCATCAGCAGCTTTTTCAGC------------TTCTTCCAGCTTTTGCAGGGC 254
Qy   43 AspGlyMetAla------------PheGlnGluAlaLeuAspProGly--- 54
         |||              |||||||
Db  253 AGTGGCCAGGCGCGTCCTGAGCACGGTCCGGCTCCTTCAACCAGCTGGATCCTACCGGTT 194
Qy   55 --------------ProPheAspGlnGlySerProPheAlaGlnGluLeuLeu 67
                       ::|||:  ::|||||||
Db  193 CAAGGAGGCCACCTCAGCCTCGGCCCTGTTCCCGGGCCCGCCTTTCTCCCT-CAACTTCTC 135
Qy   68 AspAspGlyGlnGlnAlaSerProTyrHis----------ProGlySer 80
         :::|||                          ||||||
Db  134 GCTGGAGGCGCTCAGCTCGCTCCTCTGCATCATCTGCTGCTGCAGAACCTGGATCT 75
Qy   81 CysGlyAla 83
         |||  :::
Db   74 TGCGCTTCA 66
```

```
DB:

US-08-978-217-7 (1-84) x US-08-306-691B-23 (1-2301)
Qy    6 GluLeuArgLeuValPhe------GlyProLeuGlyAspGlnHisAlaGlnLeu 22
         |||||:::  :::            |||
Db  553 GAGTTCCATCTTTTCTTCATCTTTTAAGGCCCGGTTTCAATAACCTTCATACCTCTCTC 494
Qy   23 ArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluGluLys 42
         :::||||||||            :::||
Db  493 ACTCTCATCAGCAGCTTTTTCAGC------------TTCTTCCAGCTTTTGCAGGGC 449
Qy   43 AspGlyMetAla------------PheGlnGluAlaLeuAspProGly--- 54
         |||              |||
Db  448 AGTGGCCAGGCGCGTCCTGAGCACGGTCCAGCTCCTTCTTCAACCAGCTGGATCCTACCGGTT 389
Qy   55 ------------ProPheAspGlnGlySerProPheAlaGlnGluLeuLeu 67
                                  |||
Db  388 CAAGGAGGCCACCTCAGCCTCAGCTGTTCCCGGGCCCGCCTTTCTCCCT-CAACTTCTC 330
Qy   68 AspAspGlyGlnGlnAlaSerProTyrHis------------ProGlySer 80
         :::|||                        ||||||
Db  329 GCTGGAGGCGCTCAGCTCGCTCCTCTGCATCATCTGCTGCTGCAGAACCTGGATCT 270
Qy   81 CysGlyAla 83
         |||  :::
Db  269 TGCGCTTCA 261
```

Search completed: February 12, 2004, 21:49:58
Job time : 24.1748 secs

```
RESULT 15
US-08-306-691B-23/c
; Sequence 23, Application US/08306691B
; Patent No. 5734039
; GENERAL INFORMATION:
;   APPLICANT: Calabretta, Bruno
;   APPLICANT: Skorski, Tomasz
;   TITLE OF INVENTION: ANTISENSE
;   TITLE OF INVENTION: OLIGONUCLEOTIDES TARGETING COOPERATING ONCOGENES
;   NUMBER OF SEQUENCES: 55
;   CORRESPONDENCE ADDRESS:
;     ADDRESSEE: Seidel, Gonda, Lavorgna & Monaco, P.C.
;     STREET: Two Penn Center, Suite 1800
;     CITY: Philadelphia
;     STATE: Pennsylvania
;     COUNTRY: U.S.A.
;     ZIP: 19102
;   COMPUTER READABLE FORM:
;     MEDIUM TYPE: Diskette, 3.50 inch, 720 Kb
;     COMPUTER: IBM PS/2
;     OPERATING SYSTEM: MS-DOS
;     SOFTWARE: WordPerfect 5.1
;   CURRENT APPLICATION DATA:
;     APPLICATION NUMBER: US/08/306,691B
;     FILING DATE: September 15, 1994
;     CLASSIFICATION: 514
;   PRIOR APPLICATION DATA:
;     APPLICATION NUMBER:
;     FILING DATE:
;   ATTORNEY/AGENT INFORMATION:
;     NAME: Monaco, Daniel A.
;     REGISTRATION NUMBER: 30,480
;     REFERENCE/DOCKET NUMBER: 8321-8
;   TELECOMMUNICATION INFORMATION:
;     TELEPHONE: (215) 568-8383
;     TELEFAX: (215) 568-5549
;     TELEX: No. 5734039e
; INFORMATION FOR SEQ ID NO:  23:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 2301 base pairs
;     TYPE: nucleic acid
;     STRANDEDNESS: double
;     TOPOLOGY: linear
US-08-306-691B-23

Alignment Scores:
Pred. No.:              4.46        Length:        2301
Score:                 72.00        Matches:         31
Percent Similarity:    39.81%       Conservative:    10
Best Local Similarity: 30.10%       Mismatches:      32
Query Match:           16.18%       Indels:          31
```

OM nucleic - nucleic search, using sw model

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

Run on: February 12, 2004, 21:46:16 ; Search time 14.4951 Seconds
                                       (without alignments)
                                       7673.534 Million cell updates/sec

Title: US-08-978-217-6
Perfect score: 252
Sequence: 1 AATTGTGCCCTTGAGGAGCT..........CCGGGCAGCTGTGGCGCAGGA 252

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 56978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters: 1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

Database :   Issued Patents NA:*
              1: /cgn2_6/ptodata/1/ina/5A_COMB.seq;*
              2: /cgn2_6/ptodata/1/ina/5B_COMB.seq;*
              3: /cgn2_6/ptodata/1/ina/6A_COMB.seq;*
              4: /cgn2_6/ptodata/1/ina/6B_COMB.seq;*
              5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq;*
              6: /cgn2_6/ptodata/1/ina/backfiles1.seq;*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	252	100.0	1907	4	US-09-300-958A-27	Sequence 27, Appl
2	252	100.0	1907	4	US-09-570-593-4	Sequence 4, Appli
3	252	100.0	1920	4	US-08-746-789A-1	Sequence 1, Appli
4	39	15.5	276	4	US-09-313-294A-3437	Sequence 3437, Ap
c 5	38.8	15.4	5173	1	US-08-242-677-1	Sequence 1, Appli
6	36.2	14.4	741	4	US-09-252-991A-12066	Sequence 12066, A
7	36.2	14.4	918	4	US-09-252-991A-12009	Sequence 12009, A
c 8	36.2	14.4	1650	4	US-09-252-991A-8097	Sequence 8097, Ap
9	35	14.4	2145	4	US-09-252-991A-8205	Sequence 8205, Ap
10	35	13.9	1975	2	US-08-852-743-1	Sequence 1, Appli
11	35	13.9	1975	2	US-08-185-370-1	Sequence 1, Appli
12	35	13.9	2161	3	US-08-712-709-4	Sequence 4, Appli
13	35	13.9	2161	3	US-09-111-444-4	Sequence 4, Appli
14	35	13.9	2161	3	US-09-541-228-4	Sequence 4, Appli
c 15	34.8	13.8	621	4	US-09-252-991A-8781	Sequence 8781, Ap
16	34.8	13.8	921	4	US-09-252-991A-9092	Sequence 9092, Ap
17	34.8	13.8	1512	4	US-09-252-991A-9180	Sequence 9180, Ap
c 18	34.8	13.8	1533	4	US-09-252-991A-8895	Sequence 8895, Ap
c 19	34.8	13.8	1758	4	US-09-252-991A-8997	Sequence 8997, Ap
20	34.6	13.7	6972	4	US-09-595-684B-38	Sequence 38, Appl
21	34.6	13.7	8309	4	US-09-620-312D-1083	Sequence 1083, Ap
22	34	13.5	3141	2	US-08-956-242-1	Sequence 1, Appli
23	34	13.5	3141	2	US-09-351-215-1	Sequence 1, Appli
c 24	33.8	13.4	2128	4	US-09-620-312D-197	Sequence 197, App
25	33.6	13.3	618	4	US-09-252-991A-7654	Sequence 7654, Ap
c 26	33.6	13.3	744	4	US-09-252-991A-7749	Sequence 7749, Ap
27	33.6	13.3	798	4	US-09-252-991A-7739	Sequence 7739, Ap

28	33.2	13.2	921	4	US-09-252-991A-1415	Sequence 1415, Ap
29	33.2	13.2	1206	4	US-09-252-991A-16406	Sequence 16406, A
c 30	33.2	13.2	1983	4	US-09-252-991A-16300	Sequence 16300, A
31	33	13.1	1107	4	US-09-252-991A-3936	Sequence 3936, Ap
32	33	13.1	1134	4	US-09-252-991A-3908	Sequence 3908, Ap
33	33	13.1	1217	4	US-09-594-669-11	Sequence 11, Appl
34	33	13.1	1304	4	US-09-594-669-9	Sequence 9, Appli
c 35	33	13.1	1326	4	US-09-252-991A-4002	Sequence 4002, Ap
36	33	13.1	1420	4	US-09-594-669-7	Sequence 7, Appli
c 37	32.8	13.0	1317	4	US-09-160-036-2	Sequence 2, Appli
38	32.8	13.0	1335	4	US-09-252-991A-15421	Sequence 1521, A
c 39	32.8	13.0	1392	4	US-09-160-036-11	Sequence 11, Appl
40	32.8	13.0	1645	4	US-09-620-312D-807	Sequence 807, App
41	32.8	13.0	1875	4	US-09-252-991A-5054	Sequence 5054, Ap
42	32.8	13.0	1962	4	US-09-252-991A-5020	Sequence 5020, Ap
c 43	32.8	13.0	2295	4	US-09-252-991A-5162	Sequence 5162, Ap
44	32.8	13.0	2352	4	US-09-252-991A-15532	Sequence 15532, A
c 45	32.8	13.0	2916	4	US-09-252-991A-15259	Sequence 15259, A

ALIGNMENTS

RESULT 1
US-09-300-958A-27
; Sequence 27, Application US/09300958A
; Patent No. 6495319
; GENERAL INFORMATION:
; APPLICANT: McClelland, Michael
; APPLICANT: Welsh, John
; APPLICANT: Trenkle, Thomas
; TITLE OF INVENTION: Reduced Complexity Nucleic Acid Targets and Methods of
; TITLE OF INVENTION: Using Same
; FILE REFERENCE: P-PH 3457
; CURRENT APPLICATION NUMBER: US/09/300,958A
; CURRENT FILING DATE: 1999-04-27
; PRIOR APPLICATION NUMBER: 60/083,331
; PRIOR FILING DATE: 1998-04-27
; PRIOR APPLICATION NUMBER: 60/098,070
; PRIOR FILING DATE: 1998-08-27
; PRIOR APPLICATION NUMBER: 60/118,624
; PRIOR FILING DATE: 1999-02-04
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 27
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-300-958A-27

Query Match   100.0%; Score 252; DB 4; Length 1907;
Best Local Similarity   100.0%; Pred. No. 5e-59;
Matches   252; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

Qy   1 AATTGTGCCCTTGAGGAGCTCGGTCTTGGGGCTCGTGGGGGACCAACTCCATGCC 60
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   405 AATTGTGCCCTTGAGGAGCTCGGTCTTGGGGCTCGTGGGGGACCAACTCCATGCC 464

Qy   61 CAGCTGCGGAGACCTCACTTCCAGCTCTTCGAGCTCTTCGATGAGCTCAGTTGAGCTGCTG 120
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   465 CAGCTGCGGAGACCTCACTTCCAGCTCTTCGAGCTCTTCGATGAGCTCAGTTGAGCTGCTG 524

Qy   121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTTGACCAGGGCAGC 180
            ||||||||||||||||||||||||||||||||||||||||||||||
Db   525 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTTGACCAGGGCAGC 584

Qy   181 CCCTTTGCCCAGGAGACTGCTGACGAGGTCAAGCACCCGGCAGC 240
            ||||||||||||||||||||||||||||||||||||||||||||
Db   585 CCCTTTGCCCAGGAGACTGCTGACGAGGTCAAGCACCCGGCAGC 644

Qy   241 TGTGGCGCAGGA 252
            ||||||||||||
Db   645 TGTGGCGCAGGA 656

RESULT 2
US-09-570-593-4
; Sequence 4, Application US/09570593
; Patent No. 6566063
; GENERAL INFORMATION:
; APPLICANT: Kaufmann, Joerg
; APPLICANT: Xin, Hong
; APPLICANT: Harrowe, Greg
; TITLE OF INVENTION: EXPRESSION OF ETS-DOMAIN PROTEINS IN
; TITLE OF INVENTION: CANCER
; FILE REFERENCE: 2300-1556
; CURRENT APPLICATION NUMBER: US/09/570,593
; CURRENT FILING DATE: 2000-05-12
; PRIOR APPLICATION NUMBER: 60/134,112
; PRIOR FILING DATE: 1999-05-14
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (96)...(1211)
; OTHER INFORMATION: Human epithelial-restricted with serine box (ESX)
; OTHER INFORMATION: protein.
US-09-570-593-4

Query Match   100.0%; Score 252; DB 4; Length 1907;
Best Local Similarity   100.0%; Pred. No. 5e-59;
Matches   252; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

Qy   1 AATTGTGCCCTTGAGGAGCTGCGTCTTTGGGCCTCTCGGGGACCAACTCCATGCC 60
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   405 AATTGTGCCCTTGAGGAGCTGCGTCTTTGGGCCTCTCGGGGACCAACTCCATGCC 464

Qy   61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   465 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 524

Qy   121 GAGAAGGATGGCATGGCCTTCCAGGAGCCCTTGACCAGGGCAGC 180
            ||||||||||||||||||||||||||||||||||||||||||||
Db   525 GAGAAGGATGGCATGGCCTTCCAGGAGCCCTTGACCAGGGCAGC 584

Qy   181 CCCTTTGCCCAGGAGCTGCTGGACCAGGGCCCTTGACCAGGGCAGC 240
            ||||||||||||||||||||||||||||||||||||||||||||||
Db   585 CCCTTTGCCCAGGAGCTGCTGGACCAGGGCCCTTGACCAGGGCAGC 644

Qy   241 TGTGGCGCAGGA 252
            ||||||||||||
Db   645 TGTGGCGCAGGA 656

RESULT 3
US-08-746-789A-1
; Sequence 1, Application US/0746789A
; Patent No. 5789200
; GENERAL INFORMATION:
; APPLICANT: Ismail Kola, Martin J. Tymms, Christine DeBouck
; TITLE OF INVENTION: A No. 5789200el Human ETS Family Member, ELF3
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SmithKline Beecham Corporation
; STREET: 709 Swedeland Road, P.O. Box 1539
; CITY: King of Prussia
; STATE: PA
; COUNTRY: USA
; ZIP: 19406-0939
; COMPUTER READABLE FORM:
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
; COMPUTER: IBM 486

; OPERATING SYSTEM: WINDOWS FOR WORKGROUPS
; SOFTWARE: MICROSOFT WORD
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/746,789A
; FILING DATE: No. 5789200ember 15, 1996
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: William T. Han
; REGISTRATION NUMBER: 34,344
; REFERENCE/DOCKET NUMBER: ATG 50024
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 610 270 5219
; TELEFAX: 610 270 4026
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1920
; TYPE: Nucleic Acid
; STRANDEDNESS: Single
; TOPOLOGY: Linear
; ANTI-SENSE: No
US-08-746-789A-1

Query Match   100.0%; Score 252; DB 1; Length 1920;
Best Local Similarity   100.0%; Pred. No. 5e-59;
Matches   252; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

Qy   1 AATTGTGCCCTTGAGGAGCTGGTCTCGTCTTTGGGCCTCTCGGGGACCAACTCCATGCC 60
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   424 AATTGTGCCCTTGAGGAGCTGGTCTCGTCTTTGGGCCTCTCGGGGACCAACTCCATGCC 483

Qy   61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   484 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 543

Qy   121 GAGAAGGATGGCATGGCCTTCCAGGAGCCCTAGACCCAGGGCCCTTGACCAGGGCAGC 180
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   544 GAGAAGGATGGCATGGCCTTCCAGGAGCCCTAGACCCAGGGCCCTTGACCAGGGCAGC 603

Qy   181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCAGGTCAGCAAGCAGC 240
            ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   604 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCGACCAAGCAGCAGCCCGGCAGC 663

Qy   241 TGTGGCGCAGGA 252
            ||||||||||||
Db   664 TGTGGCGCAGGA 675

RESULT 4
US-09-313-294A-3437
; Sequence 3437, Application US/09313294A
; Patent No. 6476212
; GENERAL INFORMATION:
; APPLICANT: Lalgudi, Raghunath V.
; APPLICANT: Ito, Laura Y.
; APPLICANT: Sherman, Bradley K.
; TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN EAR
; FILE REFERENCE: PL-0017 US
; CURRENT APPLICATION NUMBER: US/09/313,294A
; CURRENT FILING DATE: 1999-05-14
; NUMBER OF SEQ ID NOS: 7600
; SOFTWARE: PERL Program
; SEQ ID NO 3437
; LENGTH: 276
; TYPE: DNA
; ORGANISM: Zea mays
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No. 6476212 700611585H1
US-09-313-294A-3437

```
Query Match         15.5%;  Score 39;  DB 4;  Length 276;
Best Local Similarity  49.3%;  Pred. No. 0.07;
Matches  102;  Conservative  0;  Mismatches  105;  Indels  0;  Gaps  0;

Qy   42  GGGGGACCAACTCCAGTGCGAGACCTCACTTCCAGTCTTCTGATGAGCTCAG  101
Db   60  GGTGGAGCCCATCGTGCTGGGCGAGATCCTCCGACGGTTCTCCATGTTCCC  119
Qy  102  TTGGATCATTGAGCTGCTGGAGAGGATGGCGTGGGCGTCCTTCCAGGAGGGCCCTAGACCCAGG  161
Db  120  GCAGATCTGGGAGTTCTACAAGAAGAGGCGTGGGCGTCCTTCTGGACGGCCGAGGAGGTTGA  179
Qy  162  GCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGGCACGGTCAGCAAGCCAG  221
Db  180  CCTCTCTGCCGACGCCCGGCACTGGGACCAGCGGCGTGTCCCCCACGGCGCCACTTCAT  239
Qy  222  CCCCTACCACCCCCGGCAGTGTGCGGC  248
Db  240  CTCTCACGTGCTCGCCTTCTTCGCCGC  266
```

RESULT 5
US-08-242-677-1/c
; Sequence 1, Application US/08242677
; Patent No. 5677143
; GENERAL INFORMATION:
;   APPLICANT: Gaynor, Richard B
;   APPLICANT: Wu, Foon W.
;   TITLE OF INVENTION: Cellular Nucleic Acid Binding Protein
;   TITLE OF INVENTION: and Uses Thereof in regulating Gene Expression and in the
;   TITLE OF INVENTION: Treatment of AIDS
;   NUMBER OF SEQUENCES: 9
;   CORRESPONDENCE ADDRESS:
;   ADDRESSEE: Arnold, White & Durkee
;   STREET: P.O. Box 4433
;   CITY: Houston
;   STATE: TX
;   COUNTRY: USA
;   ZIP: 77210
;   COMPUTER READABLE FORM:
;   MEDIUM TYPE: Floppy disk
;   COMPUTER: IBM PC compatible
;   OPERATING SYSTEM: PC-DOS/MS-DOS
;   SOFTWARE: Patentin Release #1.0, Version #1.25
;   CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/08/242,677
;   FILING DATE:
;   CLASSIFICATION: 435
;   ATTORNEY/AGENT INFORMATION:
;   NAME: Mayfield, Denise L.
;   REGISTRATION NUMBER: 33,732
;   REFERENCE/DOCKET NUMBER: UTSD:401
;   TELECOMMUNICATION INFORMATION:
;   TELEPHONE: 713-787-1400
;   TELEFAX: 713-789-2679
; INFORMATION FOR SEQ ID NO: 1:
;   SEQUENCE CHARACTERISTICS:
;   LENGTH: 5173 base pairs
;   TYPE: nucleic acid
;   STRANDEDNESS: single
;   TOPOLOGY: linear
;   MOLECULE TYPE: cDNA
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: 1..4863
US-08-242-677-1

```
Query Match         15.4%;  Score 38.8;  DB 1;  Length 5173;
Best Local Similarity  50.5%;  Pred. No. 0.16;
Matches  94;  Conservative  0;  Mismatches  92;  Indels  0;  Gaps  0;

Qy   48  CCAACTCCATGCCAGTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGAT  107
```

```
Db  193  CCAACTCCGCGGCGCGCTTCCGGGAGCGGCGCCTGCGCCCCGGCTGCGCGGCGGCTCCTCGT  134
Qy  108  CATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGGCCTTAGACCCAGGGCCCTT  167
Db  133  CCTCGAGCGCGTGCAGAAGGAGGCAGCCAGCGTCTCCACGCGCCACGCGGCGGATGCCTCCCCTT  74
Qy  168  TGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCGAGCCAGCCCTA  227
Db   73  GGCACAGCGCCCAAGCAGGGGCCGGGGGTCCGGGTTCCGGGGGGGGTGCCGAGAGAGCAGCGTTCCGCGA  14
Qy  228  CCACCC  233
Db   13  GCACCC  8
```

RESULT 6
US-09-252-991A-12066
; Sequence 12066, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
;   APPLICANT: Marc J. Rubenfield et al.
;   TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
;   TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
;   FILE REFERENCE: 107196.136
;   CURRENT APPLICATION NUMBER: US/09/252,991A
;   CURRENT FILING DATE: 1999-02-18
;   PRIOR APPLICATION NUMBER: US 60/074,788
;   PRIOR FILING DATE: 1998-02-18
;   PRIOR APPLICATION NUMBER: US 60/094,190
;   PRIOR FILING DATE: 1998-07-27
;   NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 12066
;   LENGTH: 741
;   TYPE: DNA
;   ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-12066

```
Query Match         14.4%;  Score 36.2;  DB 4;  Length 741;
Best Local Similarity  47.6%;  Pred. No. 0.51;
Matches  107;  Conservative  0;  Mismatches  118;  Indels  0;  Gaps  0;

Qy   16  GAGCTGCGTCTCGTCTTTGGGCCTCTGGGGACCAACTCCATGCCCAGTCGCTGCGAGACCTC  75
Db   29  GAGGCGCTTCCTCCGCCGCCGCAGCGGCGCTCGGAACTGGACCTGCGCCTGCTGTACCTG  88
Qy   76  ACTTCCAGCTCTTCTGATGAGCTCCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATG  135
Db   89  AACACCAGTTCGATCAAGCCATGATGACATCCTCGACCTGCTCGAAGAGGCCACCAG  148
Qy  136  GCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAG  195
Db  149  GGCGGTGCCCGGTCAGCCTGCGCTGGTCGCACTACGACCGGCGCAACGACGGGTCGCCGAG  208
Qy  196  CTGCTGGACGACGGTCAGCGAGCAGCCCCTACCACCCCGGCAGC  240
Db  209  CTGGCCGAGGAGTTCCGCGAGGACTGCAGCTTCCCCTTCGCCATC  253
```

RESULT 7
US-09-252-991A-12009
; Sequence 12009, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
;   APPLICANT: Marc J. Rubenfield et al.
;   TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
;   TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
;   FILE REFERENCE: 107196.136
;   CURRENT APPLICATION NUMBER: US/09/252,991A
;   CURRENT FILING DATE: 1999-02-18
;   PRIOR APPLICATION NUMBER: US 60/074,788
;   PRIOR FILING DATE: 1998-02-18
;   PRIOR APPLICATION NUMBER: US 60/094,190
;   PRIOR FILING DATE: 1998-07-27

; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 12009
; LENGTH: 918
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-12009

Query Match   14.4%;   Score 36.2; DB 4; Length 918;
Best Local Similarity 47.6%; Pred. No. 0.53;
Matches 107; Conservative 0; Mismatches 118; Indels 0; Gaps 0;

```
Qy     16 GAGCTGCGTCTGTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTC 75
            ||||   |  ||    ||||||  || ||||||   |||  || |||||||||| ||||
Db    676 GAGCGGCTTCCTCGCCGGCGGCAGCCGGCGGCCTGGAACTGGACCTGCGCCGTCGTGTACCTG 735
Qy     76 ACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAGGATGGCATG 135
            |||                              ||||||||||||||||
Db    736 AACACCAGTTGCATCAAGGCCATGATGGACATCTCGCACCTGTCTCGAAGAGGCCCACCAG 795
Qy    136 GCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAG 195
            ||||
Db    796 GGCGGTGCCCCGGTCAGCCTGCGCTGCACTACGACCGGCAACGAACGGGTCGCCGAG 855
Qy    196 CTGCTGGACGACGGTCAGCAAGCAGCCCCTACCACCCCGGCAGC 240
            ||||  |||||||    |||  ||  |||  ||||
Db    856 CTGGGCCGAGGAGTTCCCGCGAGGACTGCGAGCTTCCCCTTCCCCTTCGCCATC 900
```

RESULT 8
US-09-252-991A-8097/c
; Sequence 8097, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 8097
; LENGTH: 1650
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-8097

Query Match   14.4%;   Score 36.2; DB 4; Length 1650;
Best Local Similarity 47.9%; Pred. No. 0.62;
Matches 104; Conservative 0; Mismatches 113; Indels 0; Gaps 0;

```
Qy      7 GCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTG 66
            ||||   |||   |  ||| ||||| |||  || |     |||  || ||||||||| |||
Db    657 GGCCATGTAGGCCGGCGTCAGCGGCGTCAGCGGCCAGTCGTGTGCGTGCACCAGGGCCGGTTG 598
Qy     67 CGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAG 126
            |                  |||   |
Db    597 CCAGCCCTGGGCGCCGCGTCCACCGGGATCTCGGCGCCGCCAGGGCACAGGGCGGCGAA 538
Qy    127 GATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTT 186
            |||||||   |||
Db    537 GCGCAGGTGGTTGTCCGGCCAGTCGTTGCCCTGGTCGTCCATGTACGGCGTACCCTCGCG 478
Qy    187 GCCCAGGAGCTGCTGACGACGGTCAGCAAGCCAGCC 223
            ||||||||||
Db    477 CTCGTAGAGCAGCAGCGGGGCAGAGCACCAGCATGACTTCC 441
```

RESULT 9
US-09-252-991A-8205

; Sequence 8205, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 8205
; LENGTH: 2145
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-8205

Query Match   14.4%;   Score 36.2; DB 4; Length 2145;
Best Local Similarity 47.9%; Pred. No. 0.66;
Matches 104; Conservative 0; Mismatches 113; Indels 0; Gaps 0;

```
Qy      7 GCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTG 66
            ||||   |||   |  ||| ||||| |||  || |     |||  || ||||||||| |||
Db   1516 GGCCATGTAGGCCGGCGTCAGCGGCCAGTCGTGGGCGTGCACCAGGGCCGGTTG 1575
Qy     67 CGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAG 126
            |                  |||   |
Db   1576 CCAGCCCTGGGCGCCGCGTCCACCGGGATCTCGGCGCCGCCAGGGCACAGGGCGGCGAA 1635
Qy    127 GATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTT 186
            |||||||   |||
Db   1636 GCGCAGGTGGTTGTCCGGCCAGTCGTTGCCCTGGTCGTCCATGTACGGCGTACCCTCGCG 1695
Qy    187 GCCCAGGAGCTGCTGACGACGGTCAGCAAGCCAGCC 223
            ||||||||||
Db   1696 CTCGTAGAGCAGCAGCGGGGCAGAGCACCAGCATGACTTCC 1732
```

RESULT 10
US-08-852-743-1
; Sequence 1, Application US/08852743
; Patent No. 5830699
; GENERAL INFORMATION:
; APPLICANT: Force, Thomas
; APPLICANT: Kyriakis, John M.
; APPLICANT: Pombo, Celia M.
; APPLICANT: Bonventre, Joseph
; TITLE OF INVENTION: SOK-1 AND METHODS OF USE
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: US
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/852,743
; FILING DATE: 7-MAY-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/016,774
; FILING DATE: 7-MAY-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Fraser, Janis K.

```
       REGISTRATION NUMBER: 34,819
       REFERENCE/DOCKET NUMBER: 00786/327001
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: 617/542-5070
       TELEFAX: 617/542-8906
       TELEX: 200154
   INFORMATION FOR SEQ ID NO: 1:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 1975 base pairs
       TYPE: nucleic acid
       STRANDEDNESS: single
       TOPOLOGY: linear
     MOLECULE TYPE: cDNA
     FEATURE:
       NAME/KEY: Coding Sequence
       LOCATION: 127...1404
US-08-852-743-1

Query Match       13.9%;   Score 35;  DB 2;  Length 1975;
Best Local Similarity 48.3%;  Pred. No. 1.4;  Gaps     0;
Matches  98;  Conservative   0;  Mismatches 105;  Indels   0;  Gaps   0;

Qy   46  GACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGG 105
                                                                       
Db  175  GAGGAGCTCTTCACCAAGCTCGACCGGATGGCGCAAGGGCTCGTTTGGGGAGGTTCTACAAG 234
                                                                       
Qy  106  ATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCCAGGGGCCC 165
                                                                       
Db  235  GGCATCGATAACCACACAAAGGAGGTGGTGGCCATCAAGATCATCGACCTGGACGGAGGAGGCC 294
                                                                       
Qy  166  TTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGAGCGGTCAGCAAGCCAGCCCC 225
                                                                       
Db  295  GAGGATGAGATCGAGGACATCCAGCAGGAGGATCACTACTTGTCCTCAGTCAGTGCGACAGCCCC 354
                                                                       
Qy  226  TACCACCCGGCAGCTGTGGCGGC 248
                                  
Db  355  TACATCACCCGCTACTTTGGGCTC 377


RESULT 11
US-09-185-370-1
; Sequence 1, Application US/09185370
; Patent No. 6093560
; GENERAL INFORMATION:
;   APPLICANT: Force, Thomas
;   APPLICANT: Kyriakis, John M.
;   APPLICANT: Pombo, Celia M.
;   APPLICANT: Bonventre, Joseph
;   TITLE OF INVENTION: SOK-1 AND METHODS OF USE
;   NUMBER OF SEQUENCES: 10
;   CORRESPONDENCE ADDRESS:
;     ADDRESSEE: Fish & Richardson, P.C.
;     STREET: 225 Franklin Street
;     CITY: Boston
;     STATE: MA
;     COUNTRY: US
;     ZIP: 02110-2804
;   COMPUTER READABLE FORM:
;     MEDIUM TYPE: Diskette
;     COMPUTER: IBM Compatible
;     OPERATING SYSTEM: Windows95
;     SOFTWARE: FastSEQ for Windows Version 2.0
;   CURRENT APPLICATION DATA:
;     APPLICATION NUMBER: US/09/185,370
;     FILING DATE:
;     CLASSIFICATION:
;   PRIOR APPLICATION DATA:
;     APPLICATION NUMBER: 08/852,743
;     FILING DATE:
;   ATTORNEY/AGENT INFORMATION:
;     NAME: Fraser, Janis K.
;     REGISTRATION NUMBER: 34,819
;     REFERENCE/DOCKET NUMBER: 00786/327001
```

```
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: 617/542-5070
       TELEFAX: 617/542-8906
       TELEX: 200154
   INFORMATION FOR SEQ ID NO: 1:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 1975 base pairs
       TYPE: nucleic acid
       STRANDEDNESS: single
       TOPOLOGY: linear
     MOLECULE TYPE: cDNA
     FEATURE:
       NAME/KEY: Coding Sequence
       LOCATION: 127...1404
US-09-185-370-1

Query Match       13.9%;   Score 35;  DB 3;  Length 1975;
Best Local Similarity 48.3%;  Pred. No. 1.4;  Gaps     0;
Matches  98;  Conservative   0;  Mismatches 105;  Indels   0;  Gaps   0;

Qy   46  GACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGG 105
                                                                       
Db  175  GAGGAGCTCTTCACCAAGCTCGACCGGATGGCGCAAGGGCTCGTTTGGGGAGGTTCTACAAG 234
                                                                       
Qy  106  ATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCCAGGGGCC 165
                                                                       
Db  235  GGCATCGATAACCACACAAAGGAGGTGGTGGCCATCAAGATCATCGACCTGGAGGAGGGC 294
                                                                       
Qy  166  TTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGAGCGGTCAGCAAGCCAGCCCC 225
                                                                       
Db  295  GAGGATGAGATCGAGGACATCCAGCAGGAGGATCACTACTGTCCTCAGTCAGTGCGACAGCCCC 354
                                                                       
Qy  226  TACCACCCGGCAGCTGTGGCGGC 248
                                  
Db  355  TACATCACCCGCTACTTTGGGCTC 377


RESULT 12
US-08-712-709-4
; Sequence 4, Application US/08712709
; Patent No. 5863780
; GENERAL INFORMATION:
;   APPLICANT: Au-Young, Janice
;   APPLICANT: Guegler, Karl J.
;   APPLICANT: Hawkins, Phillip R.
;   TITLE OF INVENTION: NOVEL HUMAN PROTEIN KINASES
;   NUMBER OF SEQUENCES: 9
;   CORRESPONDENCE ADDRESS:
;     ADDRESSEE: Incyte Pharmaceuticals, Inc.
;     STREET: 3174 Porter Drive
;     CITY: Palo Alto
;     STATE: CA
;     COUNTRY: U.S.
;     ZIP: 94304
;   COMPUTER READABLE FORM:
;     MEDIUM TYPE: Diskette
;     COMPUTER: IBM Compatible
;     OPERATING SYSTEM: DOS
;     SOFTWARE: FastSEQ Version 1.5
;   CURRENT APPLICATION DATA:
;     APPLICATION NUMBER: US/08/712,709
;     FILING DATE: Filed Herewith
;   ATTORNEY/AGENT INFORMATION:
;     NAME: Billings, Lucy J
;     REGISTRATION NUMBER: 36,749
;     REFERENCE/DOCKET NUMBER: PF-0118 US
;   TELECOMMUNICATION INFORMATION:
;     TELEPHONE: 415-855-0555
;     TELEFAX: 415-845-4166
;   INFORMATION FOR SEQ ID NO: 4:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH: 2161 base pairs
;       TYPE: nucleic acid
```

; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; IMMEDIATE SOURCE:
; LIBRARY:
; CLONE: Consensus
US-08-712-709-4

Query Match   13.9%; Score 35; DB 2; Length 2161;
Best Local Similarity 48.3%; Pred. No. 1.4;
Matches 98; Conservative 0; Mismatches 105; Indels 0; Gaps 0;

```
Qy   46 GACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGG 105
            |||              |||   |             |||         |||
Db  286 GAGGAGCTCTTCACCAAGCTCGACCGCATTGGCAAGGGCTCGTTTGGGAGGTCTACAAG 345

Qy  106 ATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCC 165
            |||      ||||||          ||||  |    ||||      |||
Db  346 GGCATCGATAACCACACAAAGGAGGTGGTGGCCATCAAGATCATCGACCTGGAGGAGGCC 405

Qy  166 TTTGACCAGGGCAGCCCCTTTGCCGACGAGCTGCTGGACGACGTCAGCAAGCCAGCCCCC 225
            |||||||    ||| |||    |||||||      |||||  |||  |||
Db  406 GAGGATGAGATCGAGGACATCAGCAGGAGATCACTGTCTCCTCAGTCAGTGCGACAGCCCC 465

Qy  226 TACCACCCCGGCAGCTGTGGCGGC 248
            ||| |||   ||  ||
Db  466 TACATCACCCGCTACTTTGGCTC 488
```

RESULT 13
US-09-111-444-4
; Sequence 4, Application US/09111444
; Patent No. 6045792
; GENERAL INFORMATION:
; APPLICANT: Au-Young, Janice
; APPLICANT: Guegler, Karl J.
; APPLICANT: Hawkins, Phillip R.
; TITLE OF INVENTION: NOVEL HUMAN PROTEIN KINASES
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Incyte Pharmaceuticals, Inc.
; STREET: 3174 Porter Drive
; CITY: Palo Alto
; STATE: CA
; COUNTRY: U.S.
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/111,444
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/712,709
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Billings, Lucy J
; REGISTRATION NUMBER: 36,749
; REFERENCE/DOCKET NUMBER: PF-0118 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-855-0555
; TELEFAX: 415-845-4166
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 2161 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; IMMEDIATE SOURCE:
; LIBRARY:

; CLONE: Consensus
US-09-111-444-4

Query Match   13.9%; Score 35; DB 3; Length 2161;
Best Local Similarity 48.3%; Pred. No. 1.4;
Matches 98; Conservative 0; Mismatches 105; Indels 0; Gaps 0;

```
Qy   46 GACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGG 105
            |||              |||   |             |||         |||
Db  286 GAGGAGCTCTTCACCAAGCTCGACCGCATTGGCAAGGGCTCGTTTGGGAGGTCTACAAG 345

Qy  106 ATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCC 165
            |||      ||||||          ||||  |    ||||      |||
Db  346 GGCATCGATAACCACACAAAGGAGGTGGTGGCCATCAAGATCATCGACCTGGAGGAGGCC 405

Qy  166 TTTGACCAGGGCAGCCCCTTTGCCGACGAGCTGCTGGACGACGTCAGCAAGCCAGCCCCC 225
            |||||||    ||| |||    |||||||      |||||  |||  |||
Db  406 GAGGATGAGATCGAGGACATCAGCAGGAGATCACTGTCTCCTCAGTCAGTGCGACAGCCCC 465

Qy  226 TACCACCCCGGCAGCTGTGGCGGC 248
            ||| |||   ||  ||
Db  466 TACATCACCCGCTACTTTGGCTC 488
```

RESULT 14
US-09-541-228-4
; Sequence 4, Application US/09541228
; Patent No. 6232077
; GENERAL INFORMATION:
; APPLICANT: Au-Young, Janice
; APPLICANT: Guegler, Karl J.
; APPLICANT: Hawkins, Phillip R.
; TITLE OF INVENTION: NOVEL HUMAN PROTEIN KINASES
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Incyte Pharmaceuticals, Inc.
; STREET: 3174 Porter Drive
; CITY: Palo Alto
; STATE: CA
; COUNTRY: U.S.
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/541,228
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/712,709
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Billings, Lucy J
; REGISTRATION NUMBER: 36,749
; REFERENCE/DOCKET NUMBER: PF-0118 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-855-0555
; TELEFAX: 415-845-4166
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 2161 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; IMMEDIATE SOURCE:
; LIBRARY:
; CLONE: Consensus
US-09-541-228-4

Query Match   13.9%; Score 35; DB 3; Length 2161;
Best Local Similarity 48.3%; Pred. No. 1.4;

```
Matches   98;  Conservative   0;  Mismatches  105;  Indels   0;  Gaps   0;

Qy    46 GACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGG 105
         ||| ||| ||||||| |||||| || ||||||  ||  ||||  ||||||||| ||||||
Db   286 GAGGAGCTCTTCACCAAGCTCGACCGCATTGGCAAGGGCTCGTTTGGGGAGGTCTACAAG 345

Qy   106 ATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCC 165
         || ||| |||  ||||| ||| || ||||||  || |||  |||| |||| |||||||||
Db   346 GGCATCGATAACCACACAAAGGAGGTGGTGGCCATCAAGATCATCGACCTGGAGGAGGCC 405

Qy   166 TTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCC 225
         ||| |||||| |||| || || ||||| || ||||| ||  |||  ||||| |||||||
Db   406 GAGGATGAGATCGAGGACATCCAGCAGGAGATCACTGTCCTCAGTCAGTGCGACAGCCCC 465

Qy   226 TACCACCCCGGCAGCTGTGGCGC 248
         |||||||| || ||||||||||
Db   466 TACATCACCCGCTACTTTGGCTC 488

RESULT 15
US-09-252-991A-8781/c
; Sequence 8781, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
;  APPLICANT: Marc J. Rubenfield et al.
;  TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
;  TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
;  FILE REFERENCE: 107196.136
;  CURRENT APPLICATION NUMBER: US/09/252,991A
;  CURRENT FILING DATE: 1999-02-18
;  PRIOR APPLICATION NUMBER: US 60/074,788
;  PRIOR FILING DATE: 1998-02-18
;  PRIOR APPLICATION NUMBER: US 60/094,190
;  PRIOR FILING DATE: 1998-07-27
;  NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 8781
;   LENGTH: 621
;   TYPE: DNA
;   ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-8781

Query Match           13.8%;  Score 34.8;  DB 4;  Length 621;
Best Local Similarity 54.8%;  Pred. No. 1.2;
Matches   69;  Conservative   0;  Mismatches  57;  Indels   0;  Gaps   0;

Qy   105 GATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCC 164
         || || || | ||||| || ||||| |||||  || ||||| |||| ||||| |||| |
Db   576 GACCGCTGACCCGGTCGGCGAGGCGGCCGAGGAGTCGCTGGACGTCGTGCTCGATCCAGCA 517

Qy   165 CTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCC 224
         | | |||||| ||||  ||  ||||||||| ||||||| ||||| ||  |||  ||||||
Db   516 CGGTGACGACGCCGGCCTGGCCGCCAGTCCAGCAGCAGCGCGCTCGAAGACCTGGATGCCGCCCT 457

Qy   225 CTACCA 230
         | ||||
Db   456 CGTCGA 451

Search completed: February 13, 2004, 01:54:41
Job time : 15.4951 secs
```

```
              GenCore version 5.1.6
       Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - nucleic search, using frame_plus_p2n model

Run on:    February 12, 2004, 19:34:21 ; Search time 93.522 Seconds
                               (without alignments)
                               1750.959 Million cell updates/sec

Title:          US-08-978-217-2
Perfect score:  1980
Sequence:       1 MAATCEISNIFSNYFSAMYS.........YKFGKNSSGWKEEEVLQSRN 371

Scoring table:  BLOSUM62
       Xgapop 10.0 , Xgapext  0.5
       Ygapop 10.0 , Ygapext  0.5
       Fgapop  6.0 , Fgapext  7.0
       Delop   6.0 , Delext   7.0

Searched:       569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters:    1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing:  Minimum Match 0%
                  Maximum Match 100%
                  Listing first 45 summaries

Command line parameters:
-MODEL=frame+_p2n.model -DEV=xlh
-Q=/cgn2_1/USPTO_spool/US08978217/runat_10022004_133826_20481/app_query.fasta_1.1500
-DB=Issued_Patents_NA -QFMT=fastap -SUFFIX=rni -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=Bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15
-MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-USER=US08978217 @CGN_1_1_115 @runat_10022004_133826_20481 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database :   Issued_Patents_NA:*
     1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
     2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
     3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
     4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
     5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
     6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

                          SUMMARIES

   Pred. No. is the number of results predicted by chance to have a
   score greater than or equal to the score of the result being printed,
   and is derived by analysis of the total score distribution.
```

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1980	100.0	1907	4	US-09-300-958A-27	Sequence 27, Appl
2	1980	100.0	1907	4	US-09-570-593-4	Sequence 282, Appli
3	1980	100.0	1920	1	US-08-746-789A-1	Sequence 1, Appli
4	903	45.6	502	4	US-09-389-681-282	Sequence 282, App
5	903	45.6	502	4	US-09-520-405B-282	Sequence 282, App
6	903	45.6	502	4	US-09-339-338-282	Sequence 282, App
7	903	45.6	502	4	US-09-433-826B-282	Sequence 282, App
8	903	45.6	502	4	US-09-604-287A-282	Sequence 282, App
9	559	28.2	5427	3	US-09-009-913-2	Sequence 2, Appli
10	555.5	28.1	5510	3	US-09-009-913-3	Sequence 3, Appli
11	555.5	28.1	5667	3	US-09-009-913-4	Sequence 4, Appli
c 12	519.5	26.2	852	3	US-09-020-956-44	Sequence 44, Appli

c 13	519.5	26.2	852	3	US-09-030-607-44	Sequence 44, Appl
c 14	519.5	26.2	852	4	US-09-439-313-44	Sequence 44, Appl
c 15	519.5	26.2	852	4	US-09-352-616A-44	Sequence 44, Appl
c 16	519.5	26.2	852	4	US-09-232-149A-44	Sequence 44, Appl
17	486.5	24.6	848	3	US-09-009-913-338	Sequence 338, App
18	422	21.3	2280	3	US-09-009-913-8	Sequence 8, Appli
19	422	21.3	2428	3	US-09-009-913-6	Sequence 6, Appli
20	422	21.3	2498	3	US-09-009-913-10	Sequence 10, Appl
21	281	14.2	237	4	US-09-016-434-927	Sequence 927, App
22	246.5	12.4	2975	1	US-08-368-281-1	Sequence 1, Appli
23	242	12.2	3240	1	US-08-368-281-3	Sequence 3, Appli
24	238.5	12.0	1894	4	US-09-570-593-1	Sequence 1, Appli
25	238.5	12.0	1905	4	US-09-055-113-2	Sequence 2, Appli
26	238.5	12.0	3317	3	US-09-570-593-12	Sequence 12, Appli
27	234.5	11.8	1752	3	US-09-360-779-1	Sequence 1, Appli
28	234.5	11.8	1752	4	US-09-435-335-1	Sequence 1, Appli
29	233	11.8	2268	3	US-09-344-579-1	Sequence 1, Appli
30	228	11.5	1604	1	US-08-306-691B-43	Sequence 43, Appli
31	228	11.5	1604	5	PCT-US93-06251-9	Sequence 9, Appli
32	214.5	10.8	1933	3	US-09-920-759-3	Sequence 3, Appli
33	214.5	10.8	1976	4	US-09-920-759-10	Sequence 10, Appli
34	213.5	10.7	1528	3	US-08-878-177-3	Sequence 3, Appli
35	212	10.7	2938	2	US-08-343-443B-3	Sequence 1, Appli
36	207	10.5	1447	3	US-08-878-177-1	Sequence 1, Appli
37	203.5	10.3	2266	4	US-09-213-767-1	Sequence 1, Appli
38	197	9.9	665	4	US-09-920-759-11	Sequence 11, Appli
39	190	9.6	2410	2	US-08-780-835B-1	Sequence 1, Appli
40	190	9.6	2410	3	US-09-303-268-1	Sequence 1, Appli
41	190	9.6	2410	3	US-09-116-049-1	Sequence 1, Appli
42	190	9.6	2410	4	US-09-884-363-1	Sequence 1, Appli
43	189	9.5	2667	4	US-08-469-412A-1	Sequence 1, Appli
44	189	9.5	2667	3	US-09-021-715-1	Sequence 1, Appli
45	185.5	9.4	2064	3	US-08-875-944B-1	Sequence 1, Appli

```
                          ALIGNMENTS

RESULT 1
US-09-300-958A-27
; Sequence 27, Application US/09300958A
; Patent No. 6495319
; GENERAL INFORMATION:
;  APPLICANT: McClelland, Michael
;  APPLICANT: Welsh, John
;  APPLICANT: Trenkle, Thomas
;  TITLE OF INVENTION: Reduced Complexity Nucleic Acid Targets and Methods of
;  TITLE OF INVENTION: Using Same
;  FILE REFERENCE: P-PH 3457
;  CURRENT APPLICATION NUMBER: US/09/300,958A
;  CURRENT FILING DATE: 1999-04-27
;  PRIOR APPLICATION NUMBER: 60/083,331
;  PRIOR FILING DATE: 1998-04-27
;  PRIOR APPLICATION NUMBER: 60/098,070
;  PRIOR FILING DATE: 1998-08-27
;  PRIOR APPLICATION NUMBER: 60/118,624
;  PRIOR FILING DATE: 1999-02-04
;  NUMBER OF SEQ ID NOS: 85
;  SOFTWARE: PatentIn Ver. 2.0
;
; SEQ ID NO 27
;  LENGTH: 1907
;  TYPE: DNA
;  ORGANISM: Homo sapiens
US-09-300-958A-27

  Alignment Scores:
  Pred. No.:                1.68e-185     Length:         1907
  Score:                    1980.00       Matches:         371
  Percent Similarity:       100.00%       Conservative:      0
  Best Local Similarity:    100.00%       Mismatches:        0
  Query Match:              100.00%       Indels:            0
  DB:                       4             Gaps:              0

US-08-978-217-2 (1-371)  x US-09-300-958A-27 (1-1907)
```

Qy   361   TrpLysGluGluValLeuGlnSerArgAsn   371
Db   1176   TGGAAGGAGGAGAAGAGGTTCCCAGAGTCGGAAC   1208

RESULT 2
US-09-570-593-4
; Sequence 4, Application US/09570593
; Patent No. 6566063
; GENERAL INFORMATION:
;   APPLICANT: Kaufmann, Joerg
;   APPLICANT: Xin, Hong
;   APPLICANT: Harrowe, Greg
;   TITLE OF INVENTION: EXPRESSION OF ETS-DOMAIN PROTEINS IN
;   TITLE OF INVENTION: CANCER
;   FILE REFERENCE: 2300-1556
;   CURRENT APPLICATION NUMBER: US/09/570,593
;   CURRENT FILING DATE: 2000-05-12
;   PRIOR APPLICATION NUMBER: 60/134,112
;   PRIOR FILING DATE: 1999-05-14
;   NUMBER OF SEQ ID NOS: 13
;   SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 4
;   LENGTH: 1907
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (96)...(1211)
;   OTHER INFORMATION: Human epithelial-restricted with serine box (ESX)
;   OTHER INFORMATION: protein.
US-09-570-593-4

Alignment Scores:
Pred. No.:   Length: 1907
Score: 1.68e-185   Matches: 371
Percent Similarity: 1980.00   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 100.00%   Indels: 0
DB: 100.00%   Gaps: 0

US-08-978-217-2 (1-371) x US-09-570-593-4 (1-1907)

Qy   1   MetAlaAlaThrCysGluIleSerAsnIlePheSerAlaMetTyrSer   20
Db   96   ATGGCTGCAACCTGTGAGATTAGCAACAATTTTAGCAACTACTTCAGTGCGATGTACAGC   155

Qy   21   SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspAspLeu   40
Db   156   TCGGAGGACTCCACCCTGGCCTCTGTTCCCCGTGCCACCTTTGGGGCCGATGACTTG   215

Qy   41   ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGluLysAlaSerTrpLeu   60
Db   216   GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG   275

Qy   61   GlyGluGlnProGlnPheTrpSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal   80
Db   276   GGGGAACAGCCCCAGTTCTGGTCAAAGACGCAGGTTCTGAAGACTACCAAGTG   335

Qy   81   GluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgCysAspMetAspGlyAla   100
Db   336   GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC   395

Qy   101   ThrLeuCysAsnCysAlaLeuGluGluGlyThrGlyValPheGlyProLeuGlyAspGln   120
Db   396   ACCCTGTGCAATTGTGCCCTTGAGGAGGGTACAGAGGTCTTCGGGCCTCTGGGGGACCAA   455

Qy   121   LeuHisAlaGlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIle   140
Db   456   CTCCATGCCCAGCTCCGAGACCTCACTTCCAGCTCTTCGATGAGCTCAGTTGGATCATT   515

Qy   141   GluLeuLeuGluLysAspGlyMetAlaPheGlnAlaLeuAspArgProGlyProPheAsp   160
Db   516   GAGCTGCTGGAAAAGGATGGCATGGCCTTTCAGGAGGCCCTAGACCCAGGGCCCTTTGAC   575

Qy   1   MetAlaAlaThrCysGluIleSerAsnIlePheSerAlaMetTyrSer   20
Db   96   ATGGCTGCAACCTGTGAGATTAGCAACAATTTTAGCAACTACTTCAGTGCGATGTACAGC   155

Qy   21   SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspAspLeu   40
Db   156   TCGGAGGACTCCACCCTGGCCTCTGTTCCCCGTGCCACCTTTGGGGCCGATGACTTG   215

Qy   41   ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGluLysAlaSerTrpLeu   60
Db   216   GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG   275

Qy   61   GlyGluGlnProGlnPheTrpSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal   80
Db   276   GGGGAACAGCCCCAGTTCTGGTCAAAGACGCAGGTTCTGAAGACTACCAAGTG   335

Qy   81   GluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgCysAspMetAspGlyAla   100
Db   336   GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC   395

Qy   101   ThrLeuCysAsnCysAlaLeuGluGluGlyThrGlyValPheGlyProLeuGlyAspGln   120
Db   396   ACCCTGTGCAATTGTGCCCTTGAGGAGGGTACAGAGGTCTTCGGGCCTCTGGGGGACCAA   455

Qy   121   LeuHisAlaGlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIle   140
Db   456   CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCGATGAGCTCAGTTGGATCATT   515

Qy   141   GluLeuLeuGluLysAspGlyMetAlaPheGlnAlaLeuAspArgProGlyProPheAsp   160
Db   516   GAGCTGCTGGAGAAGGATGGCATGGCGTTCAAGGAGCCCTAGACCCGGGCCCCTTTGAC   575

Qy   161   GlnGlySerProPheAlaGlnGlyLeuLeuLeuAspAspGlyGlnGlnIleAlaSerProTyrHis   180
Db   576   CAGGGCAGCCCCTTTGCCCAGGGACTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC   635

Qy   181   ProGlySerCysGlyAlaGlyAlaProSerProGlySerSerValSerThrAlaGly   200
Db   636   CCCGGAAGCTGCGGCGCAGGAGCGCCCCCTCCCCTGGCACGTCTCCACGCGAGGG   695

Qy   201   ThrGlyAlaSerArgSerHisSerSerSerGlyGlySerAspValAspLeuAsp   220
Db   696   ACTGGTGCTTCTCGGAGCTTCCCACTCCTCAGACTCCGTGGAAGTGACGTGACCTGGAT   755

Qy   221   ProThrAspGlyLysLeuPheProSerArgAspGlyPheArgAspCysLysLysGlyAspPro   240
Db   756   CCCACTGATGGCAAGCTCTTCCCCAGCAGAGATGGTTTCGTGACTGCAAGAAGGGGATCCC   815

Qy   241   LysHisGlyLysLysArgLysArgProArgProLysGluSerLysGluLysTyrTrpAspCys   260
Db   816   AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGTGAGCAAAGAGTAGCTGGGACTGT   875

Qy   261   LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg   280
Db   876   CTCCAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG   935

Qy   281   AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu   300
Db   936   GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA   995

Qy   301   GlyValPheLysPheLeuArgSerGluAlaValAlaAlaGlnLeuTrpGlyGlnLysLysLys   320
Db   996   GGGCTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG   1055

Qy   321   AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu   340
Db   1056   AACAGCAACATGACCTACGAGAAGCTACAGAAGCTAGAGTACTACTACAAACGGGAG   1115

Qy   341   IleLeuGluArgValAlaAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly   360
Db   1116   ATCCTGGAACGGGTGGCAGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC   1175

```
; NAME: William T. Han
; REGISTRATION NUMBER: 34,344
; REFERENCE/DOCKET NUMBER: ATG 50024
; TELECOMMUNICATION INFORMATION:
;    TELEPHONE: 610 270 5219
;    TELEFAX: 610 270 4026
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
;    LENGTH: 1920
;    TYPE: Nucleic Acid
;    STRANDEDNESS: Single
;    TOPOLOGY: Linear
;    ANTI-SENSE: No
; US-08-746-789A-1

Alignment Scores:
Pred. No.:                              Length:        1920
Score:                  1.69e-185       Matches:        371
Percent Similarity:     1980.00         Conservative:     0
Best Local Similarity:  100.00%         Mismatches:       0
Query Match:            100.00%         Indels:           0
DB:                     1               Gaps:             0

US-08-978-217-2 (1-371) x US-08-746-789A-1 (1-1920)

Qy     1 MetAlaAlaThrCysGluIleSerAsnIlePheSerAsnTyrSerAlaMetTyrSer   20
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   115 ATGGCTGCAACCTGTGAGATTAGCAACATTTTAGCAACTACTTCAGTGCGATGTACAGC  174

Qy    21 SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspAspLeu   40
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   175 TCGGAGGACTCCACCTTGGCCTCTGTCCCCCCGGCTGCCACCTTTGGGGCCGATGACTTG  234

Qy    41 ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGluLysAlaSerTrpLeu   60
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   235 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCTAGCTGGTTG  294

Qy    61 GlyGluGlnProGlnPheThrProSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal   80
           ||||||||||||||||||||||||||||||||||||||||||||||||
Db   295 GGGGAACAGCCCCAGTTCGGTCGAAGACGCAGGTTCGGACTGGGATCAGCTACCAAGTG  354

Qy    81 GlyLysAsnLysTyrAspAlaSerAlaIleAspAspPheSerArgArgCysAspMetAspGlyAla  100
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   355 GAGAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGGGCC  414

Qy   101 ThrLeuCysAsnCysAlaLeuGluGluArgLeuValPheGlyLeuProLeuGlyLeuAspGln  120
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   415 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCCTTGGGCCTTCTGGGGGACCAA  474

Qy   121 LeuHisAlaGlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIle  140
           ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   475 CTTCATGCCCAGCTGCGGAGACCTCACTTCCAGCTCTTCTGATGAGCTTCAGTTGGATCATT  534

Qy   141 GlyLeuLeuGluLysAspAspGlyMetAlaPheGlnGluLeuAlaLeuAspProGlyProPheAsp  160
           ||||||||||||||||||||||||||||||||||||||||||||||||
Db   535 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGCCCCTTGAC  594

Qy   161 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnIleAlaSerProTyrHis  180
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   595 CAGGGCAGCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC  654

Qy   181 ProGlySerCysGlyAlaGlyAlaProSerSerAspThrAlaGly  200
           |||||||||||||||||||||||||||||||||||||||||||||
Db   655 CCCGGCAGTTGCTGTGGCGCAGGAGCCCCCTCCGCAGCTCTGACGTCTCCACGCCAGGG  714

Qy   201 ThrGlyAlaSerArgSerHisSerSerAspGlyGlySerAspValAspLeuAsp  220
           ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   715 ACTGGTGGCTTCTCGGAGCTCCCACTCCTCCAGACTCCGGTGGAAGTGAACGTGACCTGGAT  774

Qy   221 ProThrAspGlyLysLeuProSerAspGlyPheArgAspCysLysLysGlyAspPro  240
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   775 CCCACTGACGGCAAGCTCTTCCCCAGCAGTGGCCGATGGTTTTCGTGACTGACAAGGGGGGATCCC  834
```

```
Qy   161 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnIleAlaSerProTyrHis  180
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   576 CAGGGCAGCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC  635

Qy   181 ProGlySerCysGlyAlaGlyAlaProSerSerAspThrAlaGly  200
           |||||||||||||||||||||||||||||||||||||||||||||
Db   636 CCCGGCAGTTGTGGGGCAGGAGCCCCCTCCGCAGCTCTGACGTCTCCACGCCAGGG  695

Qy   201 ThrGlyAlaSerArgSerHisSerSerAspGlyGlySerAspValAspLeuAsp  220
           ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   696 ACTGGTGGCTTCTCGGAGCTCCCACTCCTCCAGACTCCGGTGGAAGTGAACGTGACCTGGAT  755

Qy   221 ProThrAspGlyLysLeuProSerAspGlyPheArgAspCysLysLysGlyAspPro  240
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   756 CCCACTGACGGCAAGCTCTTCCCCAGCAGTGGCCGATGGTTTTCGTGACTGACAAGGAGGGGATCCC  815

Qy   241 LysHisIleGlyLysArgLysArgGlyArgProArgLeuSerGluSerTrpTrpAspAspCys  260
           |||||||||||||||||||||||||||||||||||||||||||||||||
Db   816 AAGCACATCGGGAAGCGGAAACGAGGCCGGCCCCGAAAGAGTACTGGGACTGT  875

Qy   261 LeuGluGluGlyGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg  280
           |||||||||||||||||||||||||||||||||||||||||||||||||||
Db   876 CTCGAGGGAGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG  935

Qy   281 AspIleLeuIleHisProGluGluAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu  300
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   936 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA  995

Qy   301 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnAlaGlnAspTrpGlyGlnLeuLeuSerLys  320
           |||||||||||||||||||||||||||||||||||||||||||||
Db   996 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGCCAAAGAAAAG 1055

Qy   321 AsnSerAsnAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu  340
           ||||||||||||||||||||||||||||||||||||||||||||||||
Db  1056 AACAGCAACAATATGACCTACGAAAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1115

Qy   341 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly  360
           ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  1116 ATCCTTGGAACGGGTGGATGGCCGGCGGCACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1175

Qy   361 TrpLysGluGluGlnValLeuGlnSerArgAsn  371
           |||||||||||||||||||||||||||||||||
Db  1176 TGGAAGGAGGAAGGAGGTTCTCCAGAGTCGAAC 1208
```

RESULT 3
US-08-746-789A-1
; Sequence 1, Application US/08746789A
; Patent No. 5789200
GENERAL INFORMATION:
;   APPLICANT: Ismail Kola, Martin J. Tymms, Christine DeBouck
;   TITLE OF INVENTION: A No. 5789200el Human ETS Family Member, ELF3
;   NUMBER OF SEQUENCES: 4
;   CORRESPONDENCE ADDRESS:
;   ADDRESSEE: Smithkline Beecham Corporation
;   STREET: 709 Swedeland Road, P.O. Box 1539
;   CITY: King of Prussia
;   STATE: PA
;   COUNTRY: USA
;   ZIP: 19406-0939
;   COMPUTER READABLE FORM:
;   MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
;   COMPUTER: IBM 486
;   OPERATING SYSTEM: WINDOWS FOR WORKGROUPS
;   SOFTWARE: MICROSOFT WORD
;   CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/08/746,789A
;   FILING DATE: No. 5789200ember 15, 1996
;   CLASSIFICATION: 514
;   PRIOR APPLICATION DATA:
;   APPLICATION NUMBER:
;   FILING DATE:
;   ATTORNEY/AGENT INFORMATION:

Left column (top):

```
Qy   241 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 260
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   835 AAGCACCGGAAACGAGAGCGCGGAAACGGCCGGCCCCGAAAGGTACTGGGACTCTGGGACTGT 894

Qy   261 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 280
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   895 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 954

Qy   281 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 300
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   955 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1014

Qy   301 GlyValPheLeuLysPheLeuArgSerGluAlaValAlaAlaGlnLeuTrpGlnLeuLysLys 320
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  1015 GGCGTCTTCAAGTTCCTGCGCTCGGAGGCTGTGGCCGCCAACTATGGGGCAAAAGAAAAG 1074

Qy   321 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrLysArgGlu 340
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  1075 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCACTGCGGTACTACAAACCGGGAG 1134

Qy   341 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysLysAsnSerSerGly 360
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  1135 ATCCTGGAACGGGTGATGGCCGGCGGACTCGTCTACAAGTTTGGCAAAAACTCAGCGGC 1194

Qy   361 TrpLysGluGluValLeuGlnSerArgAsn 371
         ||||||||||||||||||||||||||||||
Db  1195 TGGAAGGAGGAAGAGAGTTCTCCAGAGTCGGAAC 1227
```

```
RESULT 4
US-09-389-681-282
; Sequence 282, Application US/09389681A
; Patent No. 6518237
; GENERAL INFORMATION:
;   APPLICANT: Yuqui, Jiang
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.470C3
;   CURRENT APPLICATION NUMBER: US/09/389,681A
;   CURRENT FILING DATE: 1999-09-02
;   NUMBER OF SEQ ID NOS: 463
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-389-681-282

Alignment Scores:
Pred. No.:                                   502
Score:                   3.01e-80            166
Percent Similarity:      903.00              0
Best Local Similarity:   100.00%             0
Query Match:             100.00%             0
DB:                      45.61%
                         4
```

```
US-08-978-217-2 (1-371) x US-09-389-681-282 (1-502)

Qy   184 CysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGlyThrGlyAla 203
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     3 TGTGGCGCAGGAGCCCCGTCCCCGGGCAGCTCTGACGTCTCCACCGCAGGACTGGTGCT 62

Qy   204 SerArgSerSerHisSerSerSerGlySerAspSerGlyLysValAspLeuAspProThrAsp 223
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    63 TCTCGGAGCTCCCACTCCTCAGACTCCGGGAAGTGACGTGGACCTGGATCCCACTGAT 122

Qy   224 GlyLysLeuPheProSerArgAspCysPheArgGlyPheAspCysLysLysGlyHisGly 243
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   123 GGCAAGCTCTTTCCCCAGCTGACCGTGTTTCGTGACTGCAAGAAGGGGATCCCAAGCACACGGG 182

Qy   244 LysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeuGluGly 263
```

Right column (top):

```
Db   183 AAGCCGGAAACGAGAGCGCGGCCCCGAAAGGTACTGGGACTGTCTCGAGGGC 242

Qy   264 LysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleLeu 283
         |||||||||||||||||||||||||||||||||||||||||||||||||||
Db   243 AAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCTC 302

Qy   284 IleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluTyrValPhe 303
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   303 ATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAGGTCGTCTTC 362

Qy   304 LysPheLeuArgSerGluAlaValAlaAlaGlnLeuTrpGlnLnLysLysAsnSerAsn 323
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   363 AAGTTCCTGCGCTCGGAGGCTGTGGCCGCCAACTATGGGCCAAAAGAAAAGAACAGCAAC 422

Qy   324 MetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrLysArgGluIleLeuGlu 343
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   423 ATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGAA 482

Qy   344 ArgValAspGlyArgArg 349
         ||||||||||||||||||
Db   483 CGGGTGGATGGCCGGCGA 500
```

```
RESULT 5
US-09-620-405B-282
; Sequence 282, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
;   APPLICANT: Jiang, Yuqiu
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Harlocker, Susan L.
;   APPLICANT: Hepler, William T.
;   TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
;   FILE REFERENCE: 210121.470C8
;   CURRENT APPLICATION NUMBER: US/09/620,405B
;   CURRENT FILING DATE: 2000-07-20
;   NUMBER OF SEQ ID NOS: 495
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-620-405B-282

Alignment Scores:
Pred. No.:                                   502
Score:                   3.01e-80            166
Percent Similarity:      903.00              0
Best Local Similarity:   100.00%             0
Query Match:             100.00%             0
DB:                      45.61%
                         4
```

```
US-08-978-217-2 (1-371) x US-09-620-405B-282 (1-502)

Qy   184 CysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGlyThrGlyAla 203
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     3 TGTGGCGCAGGAGCCCCGTCCCCGGGCAGCTCTGACGTCTCCACCGCAGGACTGGTGCT 62

Qy   204 SerArgSerSerHisSerSerSerGlySerAspSerGlyLysValAspLeuAspProThrAsp 223
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    63 TCTCGGAGCTCCCACTCCTCAGACTCCGGGAAGTGACGTGGACCTGGATCCCACTGAT 122

Qy   224 GlyLysLeuPheProSerArgAspCysPheArgGlyPheAspCysLysLysGlyHisGly 243
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   123 GGCAAGCTCTTTCCCCAGCTGACCGTGTTTCGTGACTGCAAGAAGGGGATCCCAAGCACACGGG 182

Qy   244 LysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeuGluGly 263
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   183 AAGCCGGAAACGAGAGCGCGGCCCCGAAAGGTACTGGGACTGTCTCGAGGGC 242
```

```
RESULT 6
US-09-339-338-282
; Sequence 282, Application US/09339338A
; Patent No. 6573368
; GENERAL INFORMATION:
;   APPLICANT: Yuqiu, Jiang
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.470C2
;   CURRENT APPLICATION NUMBER: US/09/339,338A
;   CURRENT FILING DATE: 1999-06-23
;   NUMBER OF SEQ ID NOS: 315
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-339-338-282

Alignment Scores:
Pred. No.:
Score:                  3.01e-80           Length:        502
Percent Similarity:     903.00             Matches:       166
Best Local Similarity:  100.00%            Conservative:  0
Query Match:            100.00%            Mismatches:    0
                        45.61%             Indels:        0
DB:                     4                  Gaps:          0

US-08-978-217-2 (1-371) x US-09-339-338-282 (1-502)

Qy  184 CysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGlyThrGlyAla 203
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    3 TGTGGCGCAGGAGCCCCCTCCCCCGGCAGCTCCGACGTCTCCACCGCAGGGACTGGTGCT 62

Qy  204 SerArgSerHisSerSerAspSerGlyGlySerAspValAspLeuAspProThrAsp 223
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   63 TCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGAT 122

Qy  224 GlyLysPheProArgAspGlyPheArgAspCysLysLysGlyAspHisGly 243
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  123 GGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGGACTCCAAGAGGGGATCCCAAGCACGGG 182

Qy  244 LysArgGlyArgGlyProArgLeuSerLysGluProLysHisGly 263
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  183 AAGCGGAAACGAGACGCCCGGCCCCGAAGAGTGAGCAAAGAAGCACACGGG 242

Qy  264 LysLysSerLysHisAlaProArgGlyThrHisLeuTrpProGluPheIleArgAspIleLeu 283
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  243 AAGAAGAGCAAGCACGCGCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTC 302

Qy  284 IleHisProGluLeuAsnGluGlyLeuMetLysTrpLysGluHisArgHisGlyValPhe 303
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  303 ATCCACCCGGAGCTCAACGAGGGCCTGATGAAGTGGAAGGAGCATCGGCACGGCGTCTTC 362

Qy  304 LysPheLeuArgSerGluAlaValAlaAlaGlnLeuTrpGlnLysLysLysAsnSerAsn 323
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  363 AAGTTCCTGCGCTCCGAGGCTGTGGCCGCCCAACTATGGGCCAAAGAAAAGAAGAACAGCAAC 422

Qy  324 MetThrTyrGluLysSerArgArgAlaMetArgTyrTyrLysArgGluIleLeuGlu 343
            |||||||||||||||||||||||||||||||||||||||||||||||
Db  423 ATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACAAACGGGAGATCCTGGAA 482

Qy  344 ArgValAspGlyArgArg 349
            ||||||||||||||||
Db  483 CGGGTGGATGGCCGGCGA 500
```

```
RESULT 7
US-09-433-826B-282
; Sequence 282, Application US/09433826B
; Patent No. 6579973
; GENERAL INFORMATION:
;   APPLICANT: Jiang, Yuqui
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Harlocker, Susan L.
;   TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.470C4
;   CURRENT APPLICATION NUMBER: US/09/433,826B
;   CURRENT FILING DATE: 1999-11-03
;   NUMBER OF SEQ ID NOS: 474
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-433-826B-282

Alignment Scores:
Pred. No.:
Score:                  3.01e-80           Length:        502
Percent Similarity:     903.00             Matches:       166
Best Local Similarity:  100.00%            Conservative:  0
Query Match:            100.00%            Mismatches:    0
                        45.61%             Indels:        0
DB:                     4                  Gaps:          0

US-08-978-217-2 (1-371) x US-09-433-826B-282 (1-502)

Qy  184 CysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGlyThrGlyAla 203
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    3 TGTGGCGCAGGAGCCCCCTCCCCCGGCAGCTCCGACGTCTCCACCGCAGGGACTGGTGCT 62

Qy  204 SerArgSerHisSerSerAspSerGlyGlySerAspValAspLeuAspProThrAsp 223
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   63 TCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGAT 122

Qy  224 GlyLysPheProArgAspGlyPheArgAspCysLysLysGlyAspHisGly 243
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  123 GGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGGACTCCAAGAGGGGATCCCAAGCACGGG 182

Qy  244 LysArgGlyArgGlyProArgLeuSerLysGluProLysHisGly 263
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  183 AAGCGGAAACGAGACGCCCGGCCCCGAAGAGTGAGCAAAGAAGCACACGGG 242

Qy  264 LysLysSerLysHisAlaProArgGlyThrHisLeuTrpProGluPheIleArgAspIleLeu 283
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  243 AAGAAGAGCAAGCACGCGCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTC 302

Qy  284 IleHisProGluLeuAsnGluGlyLeuMetLysTrpLysGluHisArgHisGlyValPhe 303
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  303 ATCCACCCGGAGCTCAACGAGGGCCTGATGAAGTGGAAGGAGCATCGGCACGGCGTCTTC 362

Qy  304 LysPheLeuArgSerGluAlaValAlaAlaGlnLeuTrpGlnLysLysLysAsnSerAsn 323
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  363 AAGTTCCTGCGCTCCGAGGCTGTGGCCGCCCAACTATGGGCCAAAGAAAAGAAGAACAGCAAC 422

Qy  324 MetThrTyrGluLysSerArgArgAlaMetArgTyrTyrLysArgGluIleLeuGlu 343
            |||||||||||||||||||||||||||||||||||||||||||||||
Db  423 ATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACAAACGGGAGATCCTGGAA 482

Qy  344 ArgValAspGlyArgArg 349
            ||||||||||||||||
Db  483 CGGGTGGATGGCCGGCGA 500
```

Db   363 AAGTTCCTGCGCTCCGAGGCTGTGGCCAACTATGGGCCAAAAGAAAAGAACAGCAAC 422
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy   324 MetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuGlu 343
Db   324 MetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuGlu 343
Db   423 ATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGAA 482
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   423 ATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGAA 482

Qy   344 ArgValAspGlyArgArg 349
Qy   344 ArgValAspGlyArgArg 349
Db   483 CGGGTGGATGGCCGGCGA 500
Db   483 CGGGTGGATGGCCGGCGA 500

RESULT 8
US-09-604-287A-282
; Sequence 282, Application US/09604287A
; Patent No. 6586572
; GENERAL INFORMATION:
;   APPLICANT: Jiang, Yuqiu
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Harlocker, Susan L.
;   APPLICANT: Hepler, William T.
;   TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
;   FILE REFERENCE: 210121.470C7
;   CURRENT APPLICATION NUMBER: US/09/604,287A
;   CURRENT FILING DATE: 2000-06-22
;   NUMBER OF SEQ ID NOS: 489
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-604-287A-282

Alignment Scores:
Pred. No.:   3.01e-80   Length: 502
Score: 903.00   Matches: 166
Percent Similarity: 100.00%   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 45.61%   Indels: 0
DB: Gaps: 4

US-08-978-217-2 (1-371) x US-09-604-287A-282 (1-502)

Qy   184 CysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGlyThrGlyAla 203
Db   3 TGTGGCGCCAGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCT 62
Qy   204 SerArgSerSerHisSerSerAspSerGlyGlySerAspValAspLeuAspProThrAsp 223
Db   63 TCTCGGAGCTCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGAT 122
Qy   224 GlyLysLeuPheProSerAspGlyPheArgArgAspCysLysLysLysAspProLysHisGly 243
Db   123 GGCAAGCTCTTCCCCAGCGATGGTTTCGTGACTGCAAGAAGAAGGGGATCCCAAGCACGGG 182
Qy   244 LysArgLysArgLysArgProArgProArgLysLeuSerLysArgLysGluLysLysGluGluGly 263
Db   183 AAGCGGAAACCGAGGCCGGCCGAAACTGAGCAAGAGTACTGGGACTGTCTCGAGGGC 242
Qy   264 LysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleGluArgAspIleLeu 283
Db   243 AAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCGGGACATCCTC 302
Qy   284 IleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPhe 303
Db   303 ATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAGGGCTCTTC 362
Qy   304 LysPheLeuArgSerGluAlaValAlaAlaGlnAsnLeuTrpGlyGlnLysLysLysAsnSerAsn 323
Db   363 AAGTTCCTGCGCTCCGAGGCTGTGGCCAACTATGGGCCAAACATGGGGCCAAAAGAAAAGAACAGCAAC 422

RESULT 9
US-09-009-913-2
; Sequence 2, Application US/09009913
; Patent No. 6087485
; GENERAL INFORMATION:
;   APPLICANT: Axys Pharmaceuticals, Inc.
;   TITLE OF INVENTION: Asthma Related Genes
;   NUMBER OF SEQUENCES: 339
;   CORRESPONDENCE ADDRESS:
;   ADDRESSEE: Bozicevic & Reed, LLP
;   STREET: 285 Hamilton Ave, Suite 200
;   CITY: Palo Alto
;   STATE: CA
;   COUNTRY: USA
;   ZIP: 94301
;   COMPUTER READABLE FORM:
;   MEDIUM TYPE: Diskette
;   COMPUTER: IBM Compatible
;   OPERATING SYSTEM: DOS
;   SOFTWARE: FastSEQ for Windows Version 2.0
;   CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/09/009,913
;   FILING DATE: 21-JAN-1998
;   CLASSIFICATION:
;   PRIOR APPLICATION DATA:
;   APPLICATION NUMBER:
;   FILING DATE:
;   ATTORNEY/AGENT INFORMATION:
;   NAME: Sherwood, Pamela J
;   REGISTRATION NUMBER: 36,677
;   REFERENCE/DOCKET NUMBER: SEQ-4P
;   TELECOMMUNICATION INFORMATION:
;   TELEPHONE: 650-327-3231
;   TELEFAX: 650-327-3231
;   TELEX:
; INFORMATION FOR SEQ ID NO: 2:
;   SEQUENCE CHARACTERISTICS:
;   LENGTH: 5427 base pairs
;   TYPE: nucleic acid
;   STRANDEDNESS: double
;   TOPOLOGY: linear
;   MOLECULE TYPE: cDNA
US-09-009-913-2

Alignment Scores:
Pred. No.:   8.19e-45   Length: 5427
Score: 559.00   Matches: 140
Percent Similarity: 47.42%   Conservative: 44
Best Local Similarity: 36.08%   Mismatches: 88
Query Match: 28.23%   Indels: 116
DB: Gaps: 12

US-08-978-217-2 (1-371) x US-09-009-913-2 (1-5427)

Qy   27 AlaSerValProProAlaAlaThr------PheGlyAlaAspLeuValLeuThr 43
Db   84 GCTGCCTCCCTCCCTCATCAGCCACAGCTATTGGATTTCCCACCCAGAATCTTTAGGTA--- 140
Qy   44 LeuSerAsnProGlnMetSerLeuGluGly------------------------------ 53
Db   141 ------AATGAGATCATGATTCTGGAAGGAGGTGGTGTAATGAATCTCAACCCCGGCAAC 194
Qy   54 ThrGluLysAlaSer---------------------- 58
Db   195 AACTCCTTCACCAGCCGCCGGCCTGGACAGAGCTACTTCCACGTGCAATGTTTCCAGT 254

GENERAL INFORMATION:
  APPLICANT: Axys Pharmaceuticals, Inc.
  TITLE OF INVENTION: Asthma Related Genes
  NUMBER OF SEQUENCES: 339
  CORRESPONDENCE ADDRESS:
    ADDRESSEE: Bozicevic & Reed, LLP
    STREET: 285 Hamilton Ave, Suite 200
    CITY: Palo Alto
    STATE: CA
    COUNTRY: USA
    ZIP: 94301
  COMPUTER READABLE FORM:
    MEDIUM TYPE: Diskette
    COMPUTER: IBM Compatible
    OPERATING SYSTEM: DOS
    SOFTWARE: FastSEQ for Windows Version 2.0
  CURRENT APPLICATION DATA:
    APPLICATION NUMBER: US/09/009,913
    FILING DATE: 21-JAN-1998
    CLASSIFICATION:
  PRIOR APPLICATION DATA:
    APPLICATION NUMBER:
    FILING DATE:
  ATTORNEY/AGENT INFORMATION:
    NAME: Sherwood, Pamela J
    REGISTRATION NUMBER: 36,677
    REFERENCE/DOCKET NUMBER: SEQ-4P
  TELECOMMUNICATION INFORMATION:
    TELEPHONE: 650-327-3231
    TELEFAX: 650-327-3231
    TELEX:
INFORMATION FOR SEQ ID NO: 3:
  SEQUENCE CHARACTERISTICS:
    LENGTH: 5510 base pairs
    TYPE: nucleic acid
    STRANDEDNESS: double
    TOPOLOGY: linear
  MOLECULE TYPE: cDNA
US-09-009-913-3

Alignment Scores:
Pred. No.:   5510
Score: 1.85e-44   Length: 5510
                          555.50   Matches: 126
Percent Similarity: 51.24%   Conservative: 39
Best Local Similarity: 39.13%   Mismatches: 78
Query Match: 28.06%   Indels: 79
DB: 3   Gaps: 8

US-08-978-217-2 (1-371) x US-09-009-913-3 (1-5510)

```
Qy    59 ---------------TrpLeuGlyGluGlnProGlnPheTrpSerLysThrGlnValAspTrpIleSerTyr 78
                            |||     |||:||||:|:|:|||:||||||||||||||:::|||||||
Db   255 GGGTTTTTTGGAGGCCAGTGGCATGAAATTCATCCTCAGTACTGGACCAAGTACCAGTG                315

Qy    73 LeuAspTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgCysAspMetAsp 98
            :::||| ::: ||||: :::    |||||| ||||||||:::||:::||||||||:::||||||||
Db   315 TGGGAGTGGCTCCAGACACCTCCTGACACCAACCAGCTGATGCCAATTGTATCCCTTTCCAAGAGTTCGACATCAAC 475

Qy    93 SerArgCysAspMetAspGlyAlaThrLeuCysAsnCysAlaLeuGluGlyLeuValPheGlyProLeuGly 118
            ||||||:::||||::::|||||||:||||||||:||||||||||||||||||||:::|||||
Db   375 CAAGAGTTCGACATCAACGGCGCGAGCACCTCTGCAGCATGAGTTTCAGGAGTTCACCCGGCGGGGCGGGGACGGCGGGGG 535

Qy   113 ValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThr-----------------SerSerSerAspGlu 135
                     :::|||||:::|||||||||||||||||||||            |||
Db   435 GCGGCAGGGACGGCGGGGGCAGCTCTCTACAGCAACTTGCAGCATCTGAAGTGGAGTGGCTCCAGCAC---- 592

Qy   130 SerSerSerAspGluLeuSerTrpIleIleLeuLeuGluLysLysAspGlyMetAlaPheGlnGluAlaLeuAsp 155
            |||:::||||||||:::|||||||||||||||||||||:::|||||:::|||||||||
Db   495 CAGTGCAGTAGTGAC-----------------------------------------------CTGTTCCAGTCC------------ 604

Qy   150 PheGlnGluAlaLeuAspProGlyProPheAspGlnGlySerProPheAlaGlnLeuLeu 169
            :::|||||||||||||
Db   513 TTCCAGTCC------------ACACACAATGTC 533

Qy   156 ProGlyProPheAspGlnGlySerProPheAlaGlnLeuLeuGluLeuAspAspGlyGlnGln 175
            |||||||||||||
Db   605 ------------ACACACAATGTCATTGTCAGACTGAACAA 634

Qy   170 LeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySerCysGlyValGlyAlaPro 189
           :::           |||::|||
Db   534 ATTGTCAAGACTGAACAAACTGAGCCT                                        560

Qy   190 SerProGlySerSerAspValSerThrAlaGlyThrGlyAlaSerArgSerHisSer 209
                                     :::
                                            |||
Db   561 ---------------------------TCCATCATGAAACACCTGGAAAGACGAGGACTATTTATAT 599

Qy   210 SerAspSerGlyGlySerAspValAlaspSerProThrAspGlyLysLeuPheProSer 229
            ||||||                 |||:||
Db   600 GACACCAACTATGGTAGCACAGTAGATTTG-----TTGGACAGCAAAACTTTC------ 647

Qy   230 AspGlyPheArgAspCysLysLys 237
            :::
Db   648 ------------TGCCGGGCCTCAGATCTCCATGACACCACCCAGTCACCTTCCTGTT 692

Qy   238 GlyAspProLysHisGlyLysLysArgArgLysGlyArgProArgLysSerLysSerGluTyr 257
            |||:|||:||:::|||||||||||:::
Db   693 GCAGAGTCACCTGATATGGAAAAAGGAGCAAGACCCCCTGCCAGTGCCACCAA------ 749

Qy   258 TrpAspCysLeuGlyIleGlyLysLysLysSerHisAlaProArgGlyThrHisLeuTrpGlu 277
            |||||||||||||||
Db   750 ------AAGCCACAACCCAGGAGAGGGACTCACTTATGGGAA 782

Qy   278 PheLeuArgAspIleLeuIleLeuHisProGluLeuAsnGluLysLeuMetLysTrpGluAsn 297
            :::|||:::||||||||
Db   783 TTCATCCGGGACATCCTCTTGAACCCAGAAGAGACCCCAGGATTAATAAATGGGAAGAC 842

Qy   298 ArgHisGlyHisGlyValPheLysPheLeuLysPheSerGluAlaValAlaGlnLeuTrpGlyGln 317
            |||||||||||
Db   843 CGAATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAGGGAGTGGCTCAGCTATGGGGGTAAA 902

Qy   318 LysLysLysAsnSerArgAsnMetThrTyrGluLeuSerArgAlaMetArgTyrTyrTyr 337
            ||||||
Db   903 AAGAAGAACAACAGCAGCATGACCTATGAAAAGCTCAGCCGAGCTATGAGATATTACTAC 962

Qy   338 LysArgGluLeuLeuGluLeuArgValAspGlyValArgArgLeuValTyrLysPheGlyLysLysAsn 357
            |||:||
Db   963 AAAAGAGAAAATACTGAGCCTGTGGATGGAGCGAAGACCTGTATATAAATTTGGAAGAAT 1022

Qy   358 SerSerGlyTrpLysGluGluGlu 365
            :::|||:::|:||
Db  1023 GCCCGAGGATTGGAGAGAAAATGAA 1046
```

RESULT 10
US-09-009-913-3
; Sequence 3, Application US/09009913
; Patent No. 6087485

NAME: Sherwood, Pamela J
REGISTRATION NUMBER: 36,677
REFERENCE/DOCKET NUMBER: SEQ-4P
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3231
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 5667 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cDNA
US-09-009-913-4

Alignment Scores:
Pred. No.:   1.93e-44   Length: 5667
Score: 555.50   Matches: 126
Percent Similarity: 51.24%   Conservative: 39
Best Local Similarity: 39.13%   Mismatches: 78
Query Match: 28.06%   Indels: 79
DB: 3   Gaps: 8

US-08-978-217-2 (1-371) x US-09-009-913-4 (1-5667)

```
Qy    59  TrpLeuGlyGlnProGlnPheTrpSerLysThrGlnValLeuAspTrpIleSerTyr  78
Db    513 TGGCATGAAATTCATCCTCAGTACTGGACCAAGTACCCAGGTGTGGGAGTGGCTTCCAGCAC  572

Qy    79  GlnValGluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgCysAspMetAsp  98
Db    573 CTCCTGGACACCAACCAGCTGGATGCCAATTGTATCCCCTTTCCAAGAGTTCGACATCAAC  632

Qy    99  GlyAlaThrLeuCysAsnCysAlaLeuGluGluGluArgLeuValPheGlyProLeuGly  118
Db    633 GGCGAGCACCTCTGCAGCATGAGTTTGCAGGAGTTCACCGGGCCGCAGGGACGGCGGGG  692

Qy    119 AspGlnLeuHisAlaGlnLeuLeuArgAspLeuThr--------SerSerSerAspGlu  135
Db    693 CAGTTCCTTCACAGCAACTTGCAGCATCGAAGTGGAACGGCCAGTGCGTAGTGAC---  749

Qy    136 LeuSerTrpIleIleGluLeuLeuGlyLysAspIleMetAlaPheGlnGluAlaLeuAsp  155
Db    750 ---------------------------------------------CTGTTCCAGTCC---  761

Qy    156 ProGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGlnGln  175
Db    762 --------------------ACACACAATGTCATTGTCAAGACTGAACAA  791

Qy    176 AlaSerProTyrHisProGlySerCysGlyAlaGlyAlaAlaProSerProGlySerAsp  195
Db    792 ACTGAGCCT----------------------------------------------  800

Qy    196 ValSerThrAlaGlyThrGlyAlaSerArgSerHisSerSerAspSerGlyGlySer  215
Db    801 ---TCCATCATGACAACCTGGAAAGACAGGAACTATTATGACACCAACTATGGTAGC  857

Qy    216 AspValAspLeuAspProThrAspGlyLysPheProSerArgPheArgAspCys  235
Db    858 ACAGTAGATTTTG--------TTGGACAGCAAAACTTTC----------TGC  890

Qy    236 LysLys-------------------------------------GlyAspProLysHisGly  243
Db    891 CGGGGCTCAGATCTCCATGACAACCACCAGTCACCTTCCTGTTGCAGAGTCACCTGATATG  950

Qy    244 LysArgLysArgGlyArgProArgLysLeuSerLysGluGluGlyLeuGluGly  263
Db    951 AAAAGGAGCAAGACCCCCCCTGCCAAGTGCCACACCAAA-------------  989

Qy    264 LysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeu  283
Db    990 -----AAGCAACCCGAGAGGGACTCACTTATGGGAATTCATCCGGACATCCTC  1040
```

```
Qy    176 AlaSerProTyrHisProGlySerCysGlyAlaGlyAlaAlaProSerProGlySerAsp  195
Db    635 ACTGAGCCT----------------------------------------------  643

Qy    196 ValSerThrAlaGlyThrGlyAlaSerArgSerHisSerSerAspSerGlyGlySer  215
Db    644 ---TCCATCATGACAACCTGGAAAGACAGGAACTATTATGACACCAACTATGGTAGC  700

Qy    216 AspValAspLeuAspProThrAspGlyLysPheProSerArgPheArgAspCys  235
Db    701 ACAGTAGATTTG---------TTGGACAGCAAAACTTTC----------TGC  733

Qy    236 LysLys-------------------------------GlyAspProLysHisGly  243
Db    734 CGGGGCTCAGATCTCCATGACAACCACCAGTCACCTTCCTGTTGCAGAGTCACCTGATATG  793

Qy    244 LysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTyrAspCysLeuGluGly  263
Db    794 AAAAGGAGCAAGACCCCCCCTGCCAAGTGCCACCAAAA  832

Qy    264 LysLysSerLysHisAlaProArgGlyThrHisLeuTrpPheIleArgAspIleLeu  283
Db    833 --------AAGCAACCCGAGAGGGACTCACTTATGGGAATTCATCCGCGACATCCTC  883

Qy    284 IleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPhe  303
Db    884 TTGAACCCAGACAAGAACCCAGGATTTAATAAAATGGGAAGACCGATCTGAGGGCGTCTTC  943

Qy    304 LysPheLeuArgSerGluValAlaValAlaGlnLeuTrpGlyGlnLysLysLysAsnSerAsn  323
Db    944 AGGTTCTTGAAATCAGAGGCAGGCGCCTCAGCTATGGGGTAAAAGAAGACAACAGCAGC  1003

Qy    324 MetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuGlu  343
Db    1004 ATGACCTATGAAAAGCTCAGCCGAGCTATGAGATATTACTACAAAAGAGAAATACTGGAG  1063

Qy    344 ArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGlyTrpLysGlu  363
Db    1064 CGTGTGGATGGACGAAGACTGGTATATAAATTGGAAGAATGCCCGAGGATGGAGAGAA  1123

Qy    364 GluGlu  365
Db    1124 AATGAA  1129
```

RESULT 11
US-09-009-913-4
; Sequence 4, Application US/09009913
; Patent No. 6087485
GENERAL INFORMATION:
APPLICANT: AxyS Pharmaceuticals, Inc.
TITLE OF INVENTION: Asthma Related Genes
NUMBER OF SEQUENCES: 339
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Ave, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/009,913
FILING DATE: 21-JAN-1998
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:

```
Qy   71 GlnValLeuAspTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerAlaIle   90
        ::::: ||||  |||||  :|||   ||::::: : |:||:  |:||
Db  850 CAGGTGTGGGAGTGGCTCCATCACCTCCTGGACACCAACCAGCTGGATGCCAATTGTATC  791

Qy   91 AspPheSerArgCysAspMetAspGlyAlaThrLeuCysAsnCysAlaLeuGluGluLeu  110
        ::::||| ||||||||:::: :||:||||||:::  :|||||||||| :||||||||||
Db  790 CCTTTCCANGAGTTCGACATCAACGGCGAGCACCTTTGCAGCATGAGTTTGCAGGAGTTC  731

Qy  111 ArgLeuValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThr---  129
        ||| ||| |||| |||||  :|:||||:||  :|||||||||:|||
Db  730 ACCCGGCGCCAGGGACGGCGGGCACTCCTCACGCAACTTGCAGCATCGAGTGG         671

Qy  130 ------SerSerSerSerAspGluLeuSerTrpIleIleGluLeuGluLysAspGly     147
        :::||
Db  670 AACGGCCAGTGCAGTAGTGAC------                                   650

Qy  148 MetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySerProPheAlaGln  167
        ||||||
Db  649 --CTGTTCCAGTCC--                                              632

Qy  168 GluLeuLeuAspAspAspGlyGlnGlnAlaSerProTyrHisProGlySerCysGlyAlaGly 187
        :::|||||
Db  631 AATGTCATTGTCAAGACTGAACAAACTGAGCCT------                       599

Qy  188 AlaProSerProGlySerSerAspValSerThrAlaGlyThrGlyAlaSerArgSerSer  207
                                          ||||||||||||||||||:||||||
Db  598 TCCATCATGAACAACCTGGAAAGACNAGAACTAT                           566

Qy  208 HisSerSerAspSerGlySerAspValAspProThrAspGlyLysLeuPhe          227
        :::|||   |||   ||:         |||   |||
Db  565 TTATATGACACCAACTATGGTAGCACAGTAGATTTG--TTGACAGCAAAACTTTC      512

Qy  228 ProSerAspGlyPheArgAspCysLysLys                               237
        :::::
Db  511 --------------TGCCGGGCTCAGATCTCCATGACAACCACCAGTCACCTT        473

Qy  238 -----GlyAspProLysHisGlyLysLysArgGlyArgProArgLeuSerLys        255
        :::              |:||||   :::::
Db  472 CCTGTTCGCAGTCACCTGATATGAAAAAGAGACAAGACCCCTGCCAAGTGCCACACC    413

Qy  256 GluTyrTrpAspCysLeuGluGlyLysLysSerHisAlaProArgGlyThrHisLeu    275
        :::
Db  412 AAA                                 AAGCACACCCGAGAGGGACTCACTTA 383

Qy  276 TrpGluPheIleArgAspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrp  295
        :::::::::::||:     ::|     :::|   :::|
Db  382 TGGGAATTCATCCGCCACATCCTCTTGAACCCAGACCAAGAGACCCAGGATTAATAAAATGG 323

Qy  296 GluAsnArgHisGluGlyValPheLysSerGluAlaValAlaGlnLeuTrp          315
        ||:||   ::|||   |||   :::||||::::
Db  322 GAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAGCAGTGGCTCAGCTATGG  263

Qy  316 GlyGlnLysLysAsnSerAsnMetThrTyrGluLysSerArgAlaMetArgTyr       335
        ::|||   ||:||||   :::|
Db  262 GGTAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGTCAGCCGAGCTATGAGATAT   203

Qy  336 TyrTyrLysArgGluLeuLeuArgValAspLeuArgValTyrLysPheGly          355
        :::|||   :::|     ||||||   |||
Db  202 TACTACAAAAGAGAAATTCTGAGGGTGTGGATGGACGAAGACTGTATATAAATTTGGG   143

Qy  356 LysAsnSerSerGlyTrpLysGluGluGlu                               365
        :::|||::::||
Db  142 AAGAATGCCCGAGGATGGAGAAAATGAA                                 113
```

RESULT 13
US-09-030-607-44/c
; Sequence 44, Application US/09030607
; Patent No. 6262245
; GENERAL INFORMATION:
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Dillon, Davin C.
;   TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY OF PROSTATE CANCER AND METHODS FO

```
Qy  284 IleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPhe  303
        ::|||   |||   ||:|||   ::|   :::|   ||:||   ::||||   |||
Db 1041 TTGAACCCAGACAAGAACCCAGGATTAATAAAATGGGAAGACCGATTCGAGGGCGTCTTC 1100

Qy  304 LysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysAsnSerAsn     323
        :::|||   :::||||::::||||||   ::|||   ||:||||   :::
Db 1101 AGGTTCTTGAAATCAGAGGCAGTGGCTCAGCTATGGGGTAAAAGAAGAACAACAGCAGC  1160

Qy  324 MetThrTyrGluLysSerArgAlaMetArgTyrTyrTyrLysArgGluLeuLeuGlu    343
        :::|   :::|||   :::|||   :::|||   :::|     ||||||   :::
Db 1161 ATGACCTATGAAAAGTCAGCCGAGCTATGAGATATTACTACAAAAGAGAAATACTGAG   1220

Qy  344 ArgValAspGlyArgArgLeuValTyrLysPheGlyTyrAsnSerSerGlyTrpLysGlu  363
        ||||||   |||   :::||||||   |||   :::|||::::||   ::|
Db 1221 CGTGTGGATGGACGAAGACTGGTATATAAAATTTGGGAGAATGCCCGAGGATGGAGAGAA 1280

Qy  364 GluGlu                                                       365
        ||||||
Db 1281 AATGAA                                                      1286
```

RESULT 12
US-09-020-956-44/c
; Sequence 44, Application US/09020956
; Patent No. 6261562
; GENERAL INFORMATION:
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Dillon, Davin C.
;   TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY OF PROSTATE CANCER AND METHODS FO
;   NUMBER OF SEQUENCES: 178
;   CORRESPONDENCE ADDRESS:
;   ADDRESSEE: SEED and BERRY LLP
;   STREET: 6300 Columbia Center, 701 Fifth Avenue
;   CITY: Seattle
;   STATE: WA
;   COUNTRY: USA
;   ZIP: 98104
;   COMPUTER READABLE FORM:
;   MEDIUM TYPE: Floppy disk
;   COMPUTER: IBM PC compatible
;   OPERATING SYSTEM: PC-DOS/MS-DOS
;   SOFTWARE: PatentIn Release #1.0, Version #1.30
;   CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/09/020,956
;   FILING DATE: 09-FEB-1998
;   CLASSIFICATION:
;   ATTORNEY/AGENT INFORMATION:
;   NAME: Maki, David J.
;   REGISTRATION NUMBER: 31,392
;   REFERENCE/DOCKET NUMBER: 210121.427C2
;   TELECOMMUNICATION INFORMATION:
;   TELEPHONE: (206) 622-4900
;   TELEFAX: (206) 682-6031
;   INFORMATION FOR SEQ ID NO: 44:
;   SEQUENCE CHARACTERISTICS:
;   LENGTH: 852 base pairs
;   TYPE: nucleic acid
;   STRANDEDNESS: single
;   TOPOLOGY: linear
;   MOLECULE TYPE: cDNA
;   ORIGINAL SOURCE:
;   ORGANISM: Homo sapiens
US-09-020-956-44

Alignment Scores:

Pred. No.:	4.04e-42		Length:	852
Score:	519.50		Matches:	121
Percent Similarity:	50.97%		Conservative:	37
Best Local Similarity:	39.03%		Mismatches:	73
Query Match:	26.24%		Indels:	79
DB:			Gaps:	8

US-08-978-217-2 (1-371) x US-09-020-956-44 (1-852)

```
; NUMBER OF SEQUENCES: 224
; CORRESPONDENCE ADDRESS:
;   ADDRESSEE: SEED and BERRY LLP
;   STREET: 6300 Columbia Center, 701 Fifth Avenue
;   CITY: Seattle
;   STATE: WA
;   COUNTRY: USA
;   ZIP: 98104
; COMPUTER READABLE FORM:
;   MEDIUM TYPE: Floppy disk
;   COMPUTER: IBM PC compatible
;   OPERATING SYSTEM: PC-DOS/MS-DOS
;   SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/09/030,607
;   FILING DATE: 25-FEB-1998
;   CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
;   NAME: Maki, David J.
;   REGISTRATION NUMBER: 31,392
;   REFERENCE/DOCKET NUMBER: 210121.427C3
; TELECOMMUNICATION INFORMATION:
;   TELEPHONE: (206) 622-4900
;   TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 44:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 852 base pairs
;   TYPE: nucleic acid
;   STRANDEDNESS: single
;   TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; ORIGINAL SOURCE:
;   ORGANISM: Homo sapiens
US-09-030-607-44

Alignment Scores:
Pred. No.:                    4.04e-42
Score:                        519.50
Percent Similarity:           50.97%
Best Local Similarity:        39.03%
Query Match:                  26.24%
DB:

US-08-978-217-2 (1-371) x US-09-030-607-44 (1-852)

Length:                       852
Matches:                      121
Conservative:                 37
Mismatches:                   73
Indels:                       79
Gaps:                         8

Qy   71 GlnValLeuAspTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerAlaIle    90
         |||    |||    :::::  :::    :::::   :::::::  |||:::|||||
Db  850 CAGGTGTGGGAGTGGCTCCATCACCTCCTGACACCACCAGCTGGATGCCAATTGTATC    791

Qy   91 AspPheSerArgCysAspMetAspGlyAlaThrLeuCysAsnCysAlaLeuGluGluLeu   110
         |||:::|||   :::|||:::  ||:::::||| |||:::  |||:::|||||
Db  790 CCTTTCCANGAGTTGACATCAACGGCGAGCACCTTTGCAGCATGAGTTTGCAGGAGTTC    731

Qy  111 ArgLeuValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThr---   129
         ||||||   |||    :::::|||:::  |||:::||::::::|||:::
Db  730 ACCCGGCGGCGGAGGAGGACGGCGGGCANCTCCTCACGACAACTTGCAGCATCGAAGTGG   671

Qy  130 ---SerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGly        147
            ||||||||||||
Db  670 AACGGCCAGTGCAGTAGTGAC                                          650

Qy  148 MetAlaPheGlnGluAlaLeuAspProGlyProPheGlnGlySerProPheAlaGln     167
         |||||     :::::
Db  649 ---CTGTTCCAGTCC---------------------------------ACACAC        632

Qy  168 GluLeuLeuAspAspGlyGlnAlaSerProTyrHisProGlySerCysGlyAlaGly     187
         ::|||  |||:::  ||||::
Db  631 AATGTCATTGTCAAGACTGAACAAACTGAGCCT                             599

Qy  188 AlaProSerProGlySerSerAspValSerThrAlaGlyThrAlaGlyAlaSerArgSer   207
                                                             :::
Db  598 -------------------------------TCCATCATGAAACACCTGGAAAGACAACTAT   566
```

```
Qy  208 HisSerSerAspSerGlyGlySerAspValAlaSerLeuAspAspProThrAspGlyLysLeuPhe   227
         :::    |||    |||||
Db  565 TTATATGACACCAACATGGTAGCACAGTAGATTTG------TTGGACAGCAAAACTTTC       512

Qy  228 ProSerAspGlyPheArgAspCysLysLys                                      237
         |||:::
Db  511 ----------TGCCGGGCTCAGATCTCCATGACAACCACCAGTCACCTT                   473

Qy  238 -----GlyAspProLysHisGlyLysArgGlyArgProArgLysLeuSerLys              255
         |||:::::::
Db  472 CCTGTTGCAGAGTCACCTGATAGAAAAAGAGACAAGACCCCCTGCCAAGTGCCACACC         413

Qy  256 GluTyrTrpAspCysGluGlyLeuGlyLysLysHisAlaProArgGlyThrHisLeu         275
         :::
Db  412 AAA-----------------------AAGCACAACCCGAGAGGGGACTCACTTA            383

Qy  276 TrpGluPheIleArgAspIleLeuIleHisProLeuAsnGluGlyLeuMetLysTrp         295
         ||||||:::    :::
Db  382 TGGGAATTCATCCGCACATCCTCTGAACCCAGACAAGAACCCAGGATTAATAAAATGG        323

Qy  296 GluAsnArgHisGluGlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrp        315
         ||:::|||||||:::  ||:::  :::
Db  322 GAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAGAGCAGTGGCCTCAGCTATGG     263

Qy  316 GlyGlnLysLysAsnSerAsnMetThrTyrGluLysGluAlaMetArgTyr             335
         :::||||||
Db  262 GGTAAAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCTCAGCCGAGCTATGAGATAT      203

Qy  336 TyrTyrLysArgGluLeuGluArgValAlaAspGlyArgArgLeuValTyrLysPheGly       355
         :::||||||
Db  202 TACTACAAAAGAAGAATTCTGAGCGTGTGGATGGACGAAGACTGTGTATATAAAATTTGGG      143

Qy  356 LysAsnSerGlyTrpLysGluGluGlu     365
         ::::::
Db  142 AAGAATGCCCGAGGATGGAGAGAAAATGAA   113
```

```
RESULT 14
US-09-439-313-44/c
; Sequence 44, Application US/09439313
; Patent No. 6329505
; GENERAL INFORMATION:
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Harlocker, Susan Louise
;   APPLICANT: Jiang Yuqui
;   APPLICANT: Reed, Steven G.
;   APPLICANT: Kalos, Michael
;   APPLICANT: Fanger, Gary
;   APPLICANT: Retter, Mark
;   APPLICANT: Solk, John
;   APPLICANT: Day, Craig
;   TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
;     TITLE OF INVENTION: DIAGNOSIS OF PROSTATE CANCER
;   FILE REFERENCE: 210121.427C9
;   CURRENT APPLICATION NUMBER: US/09/439,313
;   CURRENT FILING DATE: 1999-11-12
;   NUMBER OF SEQ ID NOS: 575
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 44
;   LENGTH: 852
;   TYPE: DNA
;   ORGANISM: Homo sapien
;   FEATURE:
;     NAME/KEY: misc_feature
;     LOCATION: (1)...(852)
;     OTHER INFORMATION: n = A,T,C or G
US-09-439-313-44

Alignment Scores:
Pred. No.:                    4.04e-42
Score:                        519.50
Percent Similarity:           50.97%

Length:                       852
Matches:                      121
Conservative:                 37
```

Best Local Similarity: 39.03%   Mismatches: 73
Query Match: 26.24%   Indels: 79
DB: Gaps: 8

US-08-978-217-2 (1-371) x US-09-439-313-44 (1-852)

```
Qy   71  GlnValLeuAspTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerAlaIle  90
             :::  :  ::::  :::  ||::  :::::  ||||:
Db  850  CAGGTGTGGGAGTGGCTCCATCACCTCCTGGACACCAGCTGGATGCCAATTGTATC     791

Qy   91  AspPheSerArgCysAspMetAspGlyAlaThrLeuCysAsnCysAlaLeuGluLeu    110
Db  790  CCTTTCCANGAGTTCGACATCAACGGCGAGCACCTTTGCAGCATGAGTTGCAGGAGTTC   731

Qy  111  ArgLeuValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThr---  129
Db  730  ACCCGGCGGCCAGGACGGGCGGCANCTCCTCTACAGCAACTTGCAGCATCTGAAGTGG    671

Qy  130  ------SerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGly  147
Db  670  AACGGCCAGTGCAGTAGTGAC------------------------------          650

Qy  148  MetAlaPheGlnGluAlaLeuAspAspProGlyPheAspGlnGlySerProPheAlaGln  167
Db  649  ---CTGTTCCAGTCC--------------------------------ACACAC         632

Qy  168  GluLeuLeuAspAspGlyGlnAlaSerProTyrHisProGlySerCysGlyAlaGly    187
Db  631  AATGTCATTGTCAAGACTGAACAAACTGAGCCT-----------------           599

Qy  188  AlaProSerProGlySerSerAspValSerThrAlaGlyThrGlyAlaSerArgSer    207
Db  598  ----------------------------TCCATCATGAACACCTGAAAGACNAGAACTAT  566

Qy  208  HisSerSerAspSerGlyGlySerAspValAlaAspProThrAspGlyLeuLysPhe    227
Db  565  TTATATGACACCAACTATGGTAGCACAGTAGATTTG-------TTGGACAGCAAAACTTTC 512

Qy  228  ProSerAspGlyPheArgAspCysLysLys                              237
Db  511  --------------------TGCCGGCTCAGATCTCCATGACAACCACCAGTCACCTT    473

Qy  238  -----GlyAspProLysHisGlyLysArgGlyArgGlyProArgGlyLysSerLys    255
Db  472  CCTGTTGCAGAGTCACCTGATATGAAAAGAGAGCAAGACCCCCTGCCACACC          413

Qy  256  GluTyrTrpAspCysLeuGluLysLysLysLysSerLysLysLysSerLysLysHisSerLeu  275
Db  412  AAA-------------------AAGCACAACCCGAGAGGGACTCACTTA            383

Qy  276  TrpGluPheIleArgAspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrp  295
Db  382  TGGGAATTCATCCGGACATCCTTGAACCCAGAACAAGAACCCAGGATTAATAAAATGG    323

Qy  296  GluAsnArgHisGluGlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrp  315
Db  322  GAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAGGCGGCTCAGCTATGG     263

Qy  316  GlyGlnLysLysLysAsnSerAsnMetThrTyrGluLeuSerLeuSerArgAlaMetArgTyr  335
Db  262  GGTAAAAAGAAGAAACAACAGCAGCCATGACCTATGAAAAGCTCAGCCGAGCTATGAGATAT  203

Qy  336  TyrTyrLysTyrArgGluIleLeuLeuGluAlaValAspGlyArgLeuValTyrTyrLysPheGly  355
Db  202  TACTACAAAAGAGAATTCTGAGCCGTGTGGATGGACCGAGACTGTATAATTTTGGG      143

Qy  356  LysAsnSerSerGlyTrpTyrGluGluGlu                              365
Db  142  AAGAATGCCCGAGGATGGAGGAGAAATGAA                              113
```

RESULT 15
US-09-352-616A-44/c
; Sequence 44, Application US/09352616A

; Patent No. 6395278
; GENERAL INFORMATION:
; APPLICANT: Dillon, Davin C.
; APPLICANT: Harlocker, Susan Louise
; APPLICANT: Jiang, Yuqui
; APPLICANT: Xu, Jiangchun
; APPLICANT: Mitcham, Jennifer Lynn
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF PROSTATE CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.427C8
; CURRENT APPLICATION NUMBER: US/09/352,616A
; CURRENT FILING DATE: 1999-07-13
; NUMBER OF SEQ ID NOS: 472
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 44
; LENGTH: 852
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(852)
; OTHER INFORMATION: n = A, T, C or G
US-09-352-616A-44

Alignment Scores:
Pred. No.:
Score: 4.04e-42   Length: 852
Percent Similarity: 519.50   Matches: 121
Best Local Similarity: 50.97%   Conservative: 37
Query Match: 39.03%   Mismatches: 73
DB: 26.24%   Indels: 79
                                        Gaps: 8

US-09-352-616A-44

US-08-978-217-2 (1-371) x US-09-352-616A-44 (1-852)

```
Qy   71  GlnValLeuAspTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerAlaIle  90
             :::  :  ::::  :::  ||::  :::::  ||||:
Db  850  CAGGTGTGGGAGTGGCTCCATCACCTCCTGGACACCAGCTGGATGCCAATTGTATC     791

Qy   91  AspPheSerArgCysAspMetAspGlyAlaThrLeuCysAsnCysAlaLeuGluLeu    110
Db  790  CCTTTCCANGAGTTCGACATCAACGGCGAGCACCTTTGCAGCATGAGTTGCAGGAGTTC   731

Qy  111  ArgLeuValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThr---  129
Db  730  ACCCGGCGGCCAGGACGGGCGGCANCTCCTCTACAGCAACTTGCAGCATCTGAAGTGG    671

Qy  130  ------SerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGly  147
Db  670  AACGGCCAGTGCAGTAGTGAC------------------------------          650

Qy  148  MetAlaPheGlnGluAlaLeuAspAspProGlyPheAspGlnGlySerProPheAlaGln  167
Db  649  ---CTGTTCCAGTCC--------------------------------ACACAC         632

Qy  168  GluLeuLeuAspAspGlyGlnAlaSerProTyrHisProGlySerCysGlyAlaGlyLeu  187
Db  631  AATGTCATTGTCAAGACTGAACAAACTGAGCCT-----------------           599

Qy  188  AlaProSerProGlySerSerAspValSerThrAlaGlyThrGlyAlaSerArgSerSer  207
Db  598  ----------------------------TCCATCATGAACACCTGGAAAGACNAGAACTAT 566

Qy  208  HisSerSerAspSerGlyGlySerAspValAlaAspProThrAspLeuLeuPhe       227
Db  565  TTATATGACACCAACTATGGTAGCACAGTAGATTTG-----------ACACAC         512

Qy  228  ProSerAspGlyPheArgAspCysLysLys                              237
Db  511  --------------TGCCGGCTCAGATCTCCATGACAACCACCAGTCACCTT          473

Qy  238  ------GlyAspProLysHisGlyLysArgGlyArgGlyProArgGlyLeuSerLys    255
Db  472  CCTGTTCCAGAGTCACCTGATATGAAAAGAGAGCAAGACCCCCTGCCAAGTGCCACACC   413
```

```
Qy    256 GluTyrTrpAspCysLeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeu 275
              :::
Db    412 ------------------------------AAGCACAACCCGAGAGGGACTCACTTA 383

Qy    276 TrpGluPheIleArgAspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrp 295
              ||||||||||||||  |||  :::::|||||||||||||||||||  :::|||||
Db    382 TGGGAATTCATCCGCGACATCCTCTTGAACCCAGACCAAGAACCAGGATTAATAAAATGG 323

Qy    296 GluAsnArgHisGluGlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrp 315
              ||::::||  ||||||:::|||||  ||||||:::||||||||||
Db    322 GAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAGGCAGTGGCTCAGCTATGG 263

Qy    316 GlyGlnLysLysLysAsnSerAsnMetThrTyrGluLysSerArgMetArgTyr 335
              ||:::|||  ||||||||||||||||||||||||||||||||||||
Db    262 GGTAAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCCTCAGCCGAGCTATGAGATAT 203

Qy    336 TyrTyrLysGluIleLeuGluArgValAspGlyTyrArgLysValTyrLysPheGly 355
              ||||||  :::||||||||||||  :::||||||||||||||||
Db    202 TACTACAAAGAGAAATTCTGGAGCGTGTGGATGGACGAAGACTCGGTATATAAATTTGGG 143

Qy    356 LysAsnSerSerGlyTrpLysGluGlu 365
              ||||||:::|||  |||
Db    142 AAGAATGCCCGAGGATGGGAGAGAAATGAA 113
```

Search completed: February 12, 2004, 21:49:55
Job time : 105.522 secs

OM nucleic - nucleic search, using sw model

Copyright (c) 1993 - 2004 Compugen Ltd.

GenCore version 5.1.6

Run on: February 12, 2004, 21:46:16 ; Search time 64.1925 Seconds
(without alignments)
7673.534 Million cell updates/sec

Title: US-08-978-217-1
Perfect score: 1116
Sequence: 1 ATGGCTGCAACCTGTGAGAT........TTCTCCAGAGTCGGAACTGA 1116

Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 1.0

Searched: 569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters: 1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	DB	Length	ID	Description
1	1116	100.0	4	1907	US-09-300-958A-27	Sequence 27, Appl
2	1116	100.0	4	1907	US-09-570-593-4	Sequence 4, Appli
3	1109.6	99.4	4	1920	US-08-746-789A-1	Sequence 1, Appli
4	499.4	44.7	4	502	US-09-389-681-282	Sequence 282, App
5	499.4	44.7	4	502	US-09-620-405B-282	Sequence 282, App
6	499.4	44.7	4	502	US-09-339-338-282	Sequence 282, App
7	499.4	44.7	4	502	US-09-433-826B-282	Sequence 282, App
8	499.4	44.7	4	502	US-09-604-287A-282	Sequence 282, App
c 9	173.8	15.6	3	852	US-09-020-956-44	Sequence 44, Appl
c 10	173.8	15.6	3	852	US-09-030-607-44	Sequence 44, Appl
c 11	173.8	15.6	4	852	US-09-043-313-44	Sequence 44, Appl
c 12	173.8	15.6	4	852	US-09-352-616A-44	Sequence 44, Appl
c 13	173.8	15.6	4	852	US-09-232-149A-44	Sequence 44, Appl
14	173.8	15.6	4	5427	US-09-009-913-2	Sequence 2, Appli
15	173.8	15.6	3	5510	US-09-009-913-3	Sequence 3, Appli
16	173.8	15.6	3	5667	US-09-009-913-4	Sequence 4, Appli
17	166	14.9	3	237	US-09-016-434-927	Sequence 927, App
18	162.6	14.6	3	848	US-09-009-913-338	Sequence 338, App
19	101.2	9.1	3	2280	US-09-009-913-8	Sequence 8, Appli
20	101.2	9.1	3	2428	US-09-009-913-6	Sequence 6, Appli
21	101.2	9.1	3	2498	US-09-009-913-10	Sequence 10, Appl
22	84.8	7.6	2	2266	US-09-213-767-1	Sequence 1, Appli
23	78.2	7.0	3	1894	US-09-570-593-1	Sequence 1, Appli
24	78.2	7.0	3	1905	US-09-055-113-2	Sequence 2, Appli
25	78.2	7.0	4	3317	US-09-570-593-12	Sequence 12, Appl
26	73.4	6.6	1	2975	US-08-368-281-1	Sequence 1, Appli
27	73.4	6.6	3	3240	US-08-368-281-3	Sequence 3, Appli
28	69.4	6.2	4	252	US-09-016-434-307	Sequence 307, App
29	68.2	6.1	4	1933	US-09-920-759-3	Sequence 3, Appli
30	68.2	6.1	4	1976	US-09-920-759-10	Sequence 10, Appl
31	66.6	6.0	3	1752	US-09-360-779-1	Sequence 1, Appli
32	66.6	6.0	4	1752	US-09-435-335-1	Sequence 1, Appli
33	65.6	5.9	4	2268	US-09-344-579-1	Sequence 1, Appli
34	65.4	5.9	4	792	US-09-016-434-840	Sequence 840, App
35	63.4	5.7	2	2938	US-08-343-443B-3	Sequence 3, Appli
36	59.8	5.4	4	2667	US-08-469-412A-1	Sequence 1, Appli
37	59.8	5.4	3	2667	US-09-021-715-1	Sequence 1, Appli
38	59.4	5.3	3	2064	US-08-875-944B-1	Sequence 1, Appli
39	59.4	5.3	4	2064	US-09-116-049-3	Sequence 3, Appli
40	59.4	5.3	4	2064	US-09-602-868A-1	Sequence 1, Appli
41	59.4	5.3	4	2064	US-09-884-363-3	Sequence 3, Appli
42	58	5.2	4	463	US-09-300-958A-25	Sequence 25, Appl
43	58	5.2	4	665	US-09-300-759-11	Sequence 11, Appl
44	57.8	5.2	4	2532	US-09-620-312D-869	Sequence 869, App
45	53.6	4.8	3	1447	US-08-878-177-1	Sequence 1, Appli

ALIGNMENTS

RESULT 1
US-09-300-958A-27
; Sequence 27, Application US/09300958A
; Patent No. 6495319
; GENERAL INFORMATION:
; APPLICANT: McClelland, Michael
; APPLICANT: Welsh, John
; APPLICANT: Trenkle, Thomas
; TITLE OF INVENTION: Reduced Complexity Nucleic Acid Targets and Methods of
; TITLE OF INVENTION: Using Same
; FILE REFERENCE: P-PH 3457
; CURRENT APPLICATION NUMBER: US/09/300,958A
; CURRENT FILING DATE: 1999-04-27
; PRIOR APPLICATION NUMBER: 60/083,331
; PRIOR FILING DATE: 1998-04-27
; PRIOR APPLICATION NUMBER: 60/098,070
; PRIOR FILING DATE: 1998-08-27
; PRIOR APPLICATION NUMBER: 60/118,624
; PRIOR FILING DATE: 1999-02-04
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 27
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-300-958A-27

Query Match   100.0%; Score 1116; DB 4; Length 1907;
Best Local Similarity   100.0%; Pred. No. 1.6e-273;
Matches 1116; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

Qy   1 ATGGCTGCAACCTGTGAGATTAGCAACATTTTAGCAACTACTTCAGTGCGATGTACAGC 60
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   96 ATGGCTGCAACCTGTGAGATTAGCAACATTTTAGCAACTACTTCAGTGCGATGTACAGC 155

Qy   61 TCGGAGACTCCACCCTGGCCTCTGTTCCCCGTCCACCCTTTGGGCCGATGACTTG 120
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   156 TCGGAGACTCCACCCTGGCCTCTGTTCCCCGTCCACCCTTTGGGCCGATGACTTG 215

Qy   121 GTACTGACCCTGAGCAACCCCAGATGTCATTGGAGGGTACAGAGGCCAGCTGGTTG 180
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   216 GTACTGACCCTGAGCAACCCCAGATGTCATTGGAGGGTACAGAGGCCAGCTGGTTG 275

Qy   181 GGGGAACAGCCCAGTTCTGGTGAAGACGGAGTTCTGGACTCAGCTACCAAGTG 240
            ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   276 GGGGAACAGCCCAGTTCTGGTGAAGACGGAGTTCTGGACTCAGCTACCAAGTG 335

Qy   241 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACCATGATGCGCC 300
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   336 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACCATGATGCGCC 395

```
;    NUMBER OF SEQ ID NOS:  13
;    SOFTWARE:  FastSEQ for Windows Version 4.0
;    SEQ ID NO 4
;    LENGTH: 1907
;    TYPE: DNA
;    ORGANISM: Homo sapiens
;    FEATURE:
;    NAME/KEY: CDS
;    LOCATION: (96)...(1211)
;    OTHER INFORMATION: Human epithelial-restricted with serine box (ESX)
;    OTHER INFORMATION: protein.
US-09-570-593-4

Query Match      100.0%;   Score 1116;   DB 4;   Length 1907;
Best Local Similarity  100.0%;  Pred. No. 1.6e-273;
Matches 1116;  Conservative  0;  Mismatches  0;  Indels  0;  Gaps  0;

Qy     1  ATGGCTGCAACCTGTGAGATTAGCAACATTTTAGCAACTACTTCAGTGCGATGTACAGC    60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    96  ATGGCTGCAACCTGTGAGATTAGCAACATTTTAGCAACTACTTCAGTGCGATGTACAGC   155

Qy    61  TCGGAGGACTCACCCTGCCTCTGTTCCCCTGTCCCCTGCCACCTTTGGGGCCGATGACTTG   120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   156  TCGGAGGACTCACCCTGCCTCTGTTCCCCTGTCCCCTGCCACCTTTGGGGCCGATGACTTG   215

Qy   121  GTACTGACCCTGAGCAACCCCAGAGTCATTGAGGGTACAGAGAAGGCCAGCTGGTTG   180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   216  GTACTGACCCTGAGCAACCCCAGATGTCATTGAGGGTACAGAGAAGGCCAGCTGGTTG   275

Qy   181  GGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTCAGCTACCAAGTG   240
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   276  GGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTCAGCTACCAAGTG   335

Qy   241  GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACGATGGGCGCC   300
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   336  GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACGATGGGCGCC   395

Qy   301  ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTTTGGGTCTTTGGGGACCAA   360
          |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   396  ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTTTGGGTCTTTGGGGACCAA   455

Qy   361  CTCCATGCCCAGTGCGAGACCTCACTTCCAGCTCTTCTGATGAGTCATTGGATCATT   420
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   456  CTCCATGCCCAGTGCGAGACCTCACTTCCAGCTCTTCTGATGAGTCATGGATCATT   515

Qy   421  GAGCTGCTGGAGAAGATGGCATGCCTTCAGGAGGCCCTAGACCCAGGGCCCTTTGAC   480
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   516  GAGCTGCTGGAGAAGATGGCATGCCTTCAGGAGGCCCTAGACCCAGGGCCCTTTGAC   575

Qy   481  CAGGGCAGCGCCCTTTGCCCAGGAGCTGCTGACGACGGTCAGCAAGCAGCCCCTACCAC   540
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   576  CAGGGCAGCGCCCTTTGCCCAGGAGCTGCTGACGACGGTCAGCAAGCAGCCCCTACCAC   635

Qy   541  CCCGGCAGCTGTGCGCGAGGAGCCCCTCCCCTGCAGCGTCTCGACGTCTCCACGCGCAGGG   600
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   636  CCCGGCAGCTGTGCGCGAGGAGCCCCTCCCCTGCAGCGTCTCGACGTCTCCACGCGCAGGG   695

Qy   601  ACTGGTGCTTCTCGGAGCTTCGGAGGTGGAAGTGACGTGGACCTGGAT   660
          ||||||||||||||||||||||||||||||||||||||||||||||||
Db   696  ACTGGTGCTTCTCGGAGCTTCGGAGGTGGAAGTGACGTGGACCTGGAT   755

Qy   661  CCCACTGATGGCAAGCTCTTCCCCAGCAGCATGGGTTTCGTGACTGCAAGAGGGGGATCCC   720
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   756  CCCACTGATGGCAAGCTCTTCCCCAGCAGCATGGGTTTCGTGACTGCAAGAGGGGGATCCC   815

Qy   721  AAGCACGGGAAGCGGAAACGAGGCCGGCCGGCCCGAAAGTTGGCCAAACTCAGCGGC   780
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   816  AAGCACGGGAAGCGGAAACGAGGCCGGCCGGCCCGAAAGTTGGCCAAACTCAGCGGC   875

Qy   781  CTCGAGGGCAAGAGAGAGCAAGCACGCGCCCACCACCCGTGGGAGTTCATCCGG   840
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   876  CTCGAGGGCAAGAGAGAGCAAGCACGCGCCCACCACCCGTGGGAGTTCATCCGG   935

Qy   841  GACATCCTCATCCACCCCGGAGCTCAACGAGGTGGGAGAATCGGCATGA   900
          ||||||||||||||||||||||||||||||||||||||||||||||||
Db   936  GACATCCTCATCCACCCCGGAGCTCAACGAGGTGGGAGAATCGGCATGA   995

Qy   901  GGGCTCTTCAAGTTCCTGCGCTTCCGAGGCTGTGGCCCAACTATGGGCCAAAAGAAAAAG   960
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   996  GGGCTCTTCAAGTTCCTGCGCTTCCGAGGCTGTGGCCCAACTATGGGCCAAAAGAAAAAG  1055

Qy   961  AACAGCAACATGACCTACGAGAAGCTGAGCCGGGACTCGTCTACAAGTTTGGCAAAAACTCAAACGGGAG  1020
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  1056  AACAGCAACATGACCTACGAGAAGCTGAGCCGGGACTCGTCTACAAGTTTGGCAAAAACTCAAACGGGAG  1115

Qy  1021  ATCCTGGAACGGGTGGATGGCCGGGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC  1080
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  1116  ATCCTGGAACGGGTGGATGGCCGGGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC  1175

Qy  1081  TGGAAGGAGGAAGGAGGTTCTCCAGAGTCGGAACTGA  1116
          |||||||||||||||||||||||||||||||||||||
Db  1176  TGGAAGGAGGAAGGAGGTTCTCCAGAGTCGGAACTGA  1211
```

```
RESULT 2
US-09-570-593-4
;    Sequence 4, Application US/09570593
;    Patent No. 6566063
;    GENERAL INFORMATION:
;    APPLICANT: Kaufmann, Joerg
;    APPLICANT: Xin, Hong
;    APPLICANT: Harrowe, Greg
;    TITLE OF INVENTION: EXPRESSION OF ETS-DOMAIN PROTEINS IN
;    TITLE OF INVENTION: CANCER
;    FILE REFERENCE: 2300-1556
;    CURRENT APPLICATION NUMBER: US/09/570,593
;    CURRENT FILING DATE: 2000-05-12
;    PRIOR APPLICATION NUMBER: 60/134,112
;    PRIOR FILING DATE: 1999-05-14
```

Qy   841 GACATCCTCATCACCCGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 900
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   936 GACATCCTCATCACCCGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 995

Qy   901 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAGAAAAG 960
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   996 GGGGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAG 1055

Qy   961 AACAGCAACATGACCTACGAGAGCTGAGCGCGGCCGGCCATGAGTGACTACTACAACGGGAG 1020
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1056 AACAGCAACATGACCTACGAGAGCTGAGCGCGGCCGGCCATGAGTGACTACTACAACGGGAG 1115

Qy   1021 ATCCTGGAACGGGTGGATGGCCGGCGGCCACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1080
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1116 ATCCTGGAACGGGTGGATGGCCGGCGGCCACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1175

Qy   1081 TGGAAGGAGGAAGAGAGGTTCTCCAGAGTCGGAACTGA 1116
               ||||||||||||||||||||||||||||||||||||||
Db   1176 TGGAAGGAGGAAGAGAGGTTCTCCAGAGTCGGAACTGA 1211

RESULT 3
US-08-746-789A-1
; Sequence 1, Application US/08746789A
; Patent No. 5789200
; GENERAL INFORMATION:
; APPLICANT: Ismail Kola, Martin J. Tymms, Christine DeBouck
; TITLE OF INVENTION: A No. 5789200el Human ETS Family Member, ELF3
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
;   ADDRESSEE: SmithKline Beecham Corporation
;   STREET: 709 Swedeland Road, P.O. Box 1539
;   CITY: King of Prussia
;   STATE: PA
;   COUNTRY: USA
;   ZIP: 19406-0939
; COMPUTER READABLE FORM:
;   MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
;   COMPUTER: IBM 486
;   OPERATING SYSTEM: WINDOWS FOR WORKGROUPS
;   SOFTWARE: MICROSOFT WORD
; CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/08/746,789A
;   FILING DATE: No. 5789200ember 15, 1996
;   CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
;   APPLICATION NUMBER:
;   FILING DATE:
; ATTORNEY/AGENT INFORMATION:
;   NAME: William T. Han
;   REGISTRATION NUMBER: 34,344
;   REFERENCE/DOCKET NUMBER: ATG 50024
; TELECOMMUNICATION INFORMATION:
;   TELEPHONE: 610 270 5219
;   TELEFAX: 610 270 4026
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 1920
;   TYPE: Nucleic Acid
;   STRANDEDNESS: Single
;   TOPOLOGY: Linear
;   ANTI-SENSE: No
US-08-746-789A-1

Query Match   99.4%; Score 1109.6; DB 1; Length 1920;
Best Local Similarity 99.6%; Pred No. 6.7e-272;
Matches 1112; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy   1 ATGGCTGCAACCTGCTGAGATTAGCAACACATTTTTAGCAACTACTTCAGTTGCGATGTACAGC 60
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   115 ATGGCTGCAACCTGTCCAGATTAGCAACACATTTTTAGCAACTACTTCAGTTGCGATGTACAGC 174

Qy   61 TCGGAGGACTCCACCTGGGCCTCTCTTCCCCCTGCCCACCTTTGGGGCCGATGACTTG 120

Qy   175 TCGGAGGACTCCACCTTGGCCTCTGTTCCCCCTGCTGCCCACCTTTGGGGCCGATGACTTG 234
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||

Qy   121 GTACTGACCCTGAGCAACCCCAGATGTCATTGGAGAGGTACAGAGAGGCCAGCTGACTTG 180
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   235 GTACTGACCCTGAGCAACCCCAGATGTCATTGGAGAGGTACAGAGAGGTAGCTGGTTG 294

Qy   181 GGGGAACAGCCCAGTTCTGTCGAAGACGCAGGTTCTGACTGGATCAGCTACCAAGTG 240
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   295 GGGGAACAGCCCAGTTCTGTCGAAGACGCAGGTTCTGACTGGATCAGCTACCAAGTG 354

Qy   241 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGCGCC 300
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   355 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGGCC 414

Qy   301 ACCCTCTGCAATTGTGCCCTTGGTCGTGTCGGTCTTTGGTCTTTGGGGACCAA 360
                |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   415 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCGTGTCGGTCTTTGGTCTTTGGGGACCAA 474

Qy   361 CTCCATGCCCAGCTGCGAGACCTCACTTCACTTCCAGCTCTTCTGATGAGTCAGTTGGATCATT 420
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   475 CTCCATGCCCAGCTGCGAGACCTCACTTCACTTCCAGCTCTTCTGATGAGTCAGTTGGATCATT 534

Qy   421 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCACCCTTTGAC 480
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   535 GAGCTGCTGGAGAAGGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCACCCTTTGAC 594

Qy   481 CAGGGCAGCCCCTTTGCCCAGGAGTGCTGACGAGTCTGACAAGCCAGCCCACCCTACCAC 540
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   595 CAGGGCAGCCCCTTTGCCCAGGAGTGCTGACGAGTCTGACAAGCCAGCCCACCCTACCAC 654

Qy   541 CCCGGCAGTCGTGTGGGCGCAGGAGCCCCCTCCCCTGGCAGTCTTCCACCGAGTCTCCACCGCAGGG 600
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   655 CCCGGCAGTCGTGTGGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGAGTCTCCACCGCAGGG 714

Qy   601 ACTGGTTGCTTCTCGGAGCTCCGGAGCTCCGGTGGAACTCCGGTGGAAGTGACGTGGACCTGGAT 660
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   715 ACTGGTTGCTTCTCGGAGCTCCGGAGCTCCGGTGGAACTCCGGTGGAAGTGACGTGGACCTGGAT 774

Qy   661 CCCACTGATGGCCAAGCTCTTCGTTTCGTGACTGATGGTTTTCGTGACTGCAAGAGAGGGGATCCC 720
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   775 CCCACTGATGGCCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAGAGGGGATCCC 834

Qy   721 AAGCACGGAGAGCGAAACGAGGCCCGCCCCAGAAGTCGAGCAAAGAGTACTGGGACTGT 780
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   835 AAGCACGGAGAGCGAAACGAGGCCCGGCCCCAGAAGTCGAGCAAAGAGTACTGGGACTGT 894

Qy   781 CTCGAGGGCAAGAGAGCAAGCACGCGCCACCGCACGCCCAGAGGCACCCACCCTGTGGGAGTTCATCCGG 840
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   895 CTCGAGGGCAAGAGAGCAAGCACGCGCCACCGCACGCCCAGAGGCACCCACCCTGTGGGAGTTCATCCGG 954

Qy   841 GACATCCTCATCCACCCGGAGCTCAACGACGAGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 900
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   955 GACATCCTCATCCATCACCCGGAGCTCAACGACGAGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1014

Qy   901 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGCCCAAAAGAAAAG 960
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1015 GGGGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGCCCAAAAGAAAAG 1074

Qy   961 AACAGCAACATGACCTACGAGAGCTGAGCGCCATGAGTGACTACTACAACGGGAG 1020
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1075 AACAGCAACATGACCTACGAGAGCTGAGCGCCATGAGTGACTACTACAACGGGAG 1134

Qy   1021 ATCCTGGAACGGGTGGATGGCCGGCGGCCATGAGTGCTGTCCAGAGTGCGATGTACAGCTGA 1080
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1135 ATCCTGGAACGGGTGGATGGCCGGCGGCCATGAGTGCTGTCCACAGTTTGCAACAAACTCAAGCGGC 1194

Qy   1081 TGGAAGGAGGAAGAGAGGTTCTCCAGAGTCGGAACTGA 1116
                ||||||||||||||||||||||||||||||||||||||
Db   1195 TGGAAGGAGGAAGAGAGGTTCTCCAGAGTCGGAACTGA 1230

RESULT 4

US-09-389-681-282
; Sequence 282, Application US/09389681A
; Patent No. 6518237
; GENERAL INFORMATION:
;   APPLICANT: Yuqui, Jiang
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.470C3
;   CURRENT APPLICATION NUMBER: US/09/389,681A
;   CURRENT FILING DATE: 1999-09-02
;   NUMBER OF SEQ ID NOS: 463
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-389-681-282

Query Match   44.7%;   Score 499.4; DB 4; Length 502;
Best Local Similarity   99.8%;   Pred. No. 1.8e-117;
Matches   500; Conservative   0; Mismatches   1; Indels   0; Gaps   0;

Qy   549 CTGTGGCGCAGGAGCCCCTCCCCTGGCAGTCTTCCACCGCAGGGACTGGTGC 608
          |||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2 CTGTGGCGCAGGAGCCCCTCCCCTGGCAGTCTTCCACCGCAGGGACTGGTGC 61

Qy   609 TTCTCGGAGCTCCCACTCCTCCAGACTCCGGTGGAAGTGACGTGCAAGAGAGGGGGATCCCAAGCACGG 668
          |||||||||||||||||||||||||||||||||||||||||||||
Db   62 TTCTCGGAGCTCCCACTCCTCCAGACTCCGGTGGAAGTGACGTGCAAGAGAGGGGGATCCCAAGCACGG 121

Qy   669 TGGCAAGCTCTTCCCCAGCGATGGTTTCGTGACTGTGGGATCCAAGAAGGGGGATCCCAAGCACGG 728
          |||||||||||||||||||||||||||||||||||||||||||||
Db   122 TGGCAAGCTCTTCCCCAGCGATGGTTTCGTGACTGTGGGATCCAAGAAGGGGGATCCCAAGCACGG 181

Qy   729 GAAGCGGAAACGAGGCGCCGGCGCCCCGAAAGTCGAGCAAGAGTACTGGGACTGTCTCGAGGG 788
          |||||||||||||||||||||||||||||||||||||||||||||
Db   182 GAAGCGGAAACGAGGCGCCGGCGCCCCGAAAGTCGAGCAAGAGTACTGGGACTGTCTCGAGGG 241

Qy   789 CAAGAAGAGCAAGCAGCACGCGCGCCCAGAGAGCCCTCATGAAGTGGGAGCATGAAGGCGTCTT 848
          |||||||||||||||||||||||||||||||||||||||||||||
Db   242 CAAGAAGAGCAAGCAGCACGCGCGCCCAGAGAGCCCTCATGAAGTGGGAGCATGAAGGCGTCTT 301

Qy   849 CATCCACCCGGAGCTCAACGAGGCCCTGTGGCCCAACTATGGGCCAAAAGAAAAGAACAGCAA 908
          |||||||||||||||||||||||||||||||||||||||||||||
Db   302 CATCCACCCGGAGCTCAACGAGGCCCTGTGGCCCAACTATGGGCCAAAAGAAAAGAACAGCAA 361

Qy   909 CAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGCCAAAAGAAAAGAACAGCAA 968
          |||||||||||||||||||||||||||||||||||||||||||||
Db   362 CAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGCCAAAAGAAAAGAACAGCAA 421

Qy   969 CATGACCTACGAGAAGCTGAGCCGGGACCATGAGGTACTACTCAAACGGAGATCCTGGA 1028
          |||||||||||||||||||||||||||||||||||||||||||||
Db   422 CATGACCTACGAGAAGCTGAGCCGGGACCATGAGGTACTACTCAAACGGAGATCCTGGA 481

Qy   1029 ACGGGTGGATGGCCGGCGACT 1049
          ||||||||||||||||||||||
Db   482 ACGGGTGGATGGCCGGCGACT 502

RESULT 5
US-09-620-405B-282
; Sequence 282, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
;   APPLICANT: Jiang, Yuqiu
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Harlocker, Susan L.
;   APPLICANT: Hepler, William T.

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
FILE REFERENCE: 210121.470C8
CURRENT APPLICATION NUMBER: US/09/620,405B
CURRENT FILING DATE: 2000-07-20
NUMBER OF SEQ ID NOS: 495
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-620-405B-282

Query Match   44.7%;   Score 499.4; DB 4; Length 502;
Best Local Similarity   99.8%;   Pred. No. 1.8e-117;
Matches   500; Conservative   0; Mismatches   1; Indels   1; Gaps   0;

Qy   549 CTGTGGCGCAGGAGCCCCTCCCCTGGCAGTCTTCCACCGCAGGGACTGGTGC 608
          |||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2 CTGTGGCGCAGGAGCCCCTCCCCTGGCAGTCTTCCACCGCAGGGACTGGTGC 61

Qy   609 TTCTCGGAGCTCCCACTCCTCCAGACTCCGGTGGAAGTGACGTGCAAGAGAGGGGGATCCCAAGCACGG 668
          |||||||||||||||||||||||||||||||||||||||||||||
Db   62 TTCTCGGAGCTCCCACTCCTCCAGACTCCGGTGGAAGTGACGTGCAAGAGAGGGGGATCCCAAGCACGG 121

Qy   669 TGGCAAGCTCTTCCCCAGCGATGGTTTCGTGACTGTGGGATCCAAGAAGGGGGATCCCAAGCACGG 728
          |||||||||||||||||||||||||||||||||||||||||||||
Db   122 TGGCAAGCTCTTCCCCAGCGATGGTTTCGTGACTGTGGGATCCAAGAAGGGGGATCCCAAGCACGG 181

Qy   729 GAAGCGGAAACGAGGCGCCGGCGCCCCGAAAGTCGAGCAAGAGTACTGGGACTGTCTCGAGGG 788
          |||||||||||||||||||||||||||||||||||||||||||||
Db   182 GAAGCGGAAACGAGGCGCCGGCGCCCCGAAAGTCGAGCAAGAGTACTGGGACTGTCTCGAGGG 241

Qy   789 CAAGAAGAGCAAGCAGCACGCGCGCCCAGAGAGCCCTCATGAAGTGGGAGCATGAAGGCGTCTT 848
          |||||||||||||||||||||||||||||||||||||||||||||
Db   242 CAAGAAGAGCAAGCAGCACGCGCGCCCAGAGAGCCCTCATGAAGTGGGAGCATGAAGGCGTCTT 301

Qy   849 CATCCACCCGGAGCTCAACGAGGCCCTGTGGCCCAACTATGGGCCAAAAGAAAAGAACAGCAA 908
          |||||||||||||||||||||||||||||||||||||||||||||
Db   302 CATCCACCCGGAGCTCAACGAGGCCCTGTGGCCCAACTATGGGCCAAAAGAAAAGAACAGCAA 361

Qy   909 CAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGCCAAAAGAAAAGAACAGCAA 968
          |||||||||||||||||||||||||||||||||||||||||||||
Db   362 CAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGCCAAAAGAAAAGAACAGCAA 421

Qy   969 CATGACCTACGAGAAGCTGAGCCGGGACCATGAGGTACTACTCAAACGGAGATCCTGGA 1028
          |||||||||||||||||||||||||||||||||||||||||||||
Db   422 CATGACCTACGAGAAGCTGAGCCGGGACCATGAGGTACTACTCAAACGGAGATCCTGGA 481

Qy   1029 ACGGGTGGATGGGCCGGCGACT 1049
          ||||||||||||||||||||||
Db   482 ACGGGTGGATGGGCCGGCGACT 502

RESULT 6
US-09-339-338A-282
; Sequence 282, Application US/09339338A
; Patent No. 6573368
; GENERAL INFORMATION:
;   APPLICANT: Yuqiu, Jiang
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.470C2
;   CURRENT APPLICATION NUMBER: US/09/339,338A
;   CURRENT FILING DATE: 1999-06-23
;   NUMBER OF SEQ ID NOS: 315
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA

; ORGANISM: Homo sapiens
US-09-339-338-282

Query Match   44.7%; Score 499.4; DB 4; Length 502;
Best Local Similarity   99.8%; Pred. No. 1.8e-117;
Matches 500; Conservative   0; Mismatches   1; Indels   0; Gaps   0;

Qy   549 CTGTGGGCAGGAGGAGCCCCTCCCCGGCAGTCTCCACCGCAGGGACTGGTGC 608
          ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2 CTGTGGGCAGGAGGAGCCCCTCCCCGGCAGTCTCCACCGCAGGGACTGGTGC 61

Qy   609 TTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACTCCACTGA 668
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   62 TTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACTCCACTGA 121

Qy   669 TGGCAAGCTCTTCCCCAGCGATGGTTTCGTGACTGCAAGAAGGGGATCCCAAGCACGG 728
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   122 TGGCAAGCTCTTCCCCAGCGATGGTTTCGTGACTGCAAGAAGGGGATCCCAAGCACGG 181

Qy   729 GAAGCGGAAACGAGGCCGGCCGCCCCGAAAGTGAGCAAAGAGTACTGGGAGG 788
          ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   182 GAAGCGGAAACGAGGCCGGCCGCCCCGAAAGTGAGCAAAGAGTACTGGGAGG 241

Qy   789 CAAGAAGAGCAAGCACGCGCCAGAGAGCCACCCACCTGTGGGAGTTCATCCGGACATCCT 848
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   242 CAAGAAGAGCAAGCACGCGCCAGAGAGCCACCCACCTGTGGGAGTTCATCCGGACATCCT 301

Qy   849 CATCCACCCGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTT 908
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   302 CATCCACCCGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTT 361

Qy   909 CAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGCCAAAGAAAAGAACAGCAA 968
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   362 CAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGCCAAAGAAAAGAACAGCAA 421

Qy   969 CATGACCTACAGAAGCTGAGCCGGCCATGAGGTACTACTACAAACGGGAGATCCTGA 1028
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   422 CATGACCTACAGAAGCTGAGCCGGCCATGAGGTACTACTACAAACGGGAGATCCTGA 481

Qy   1029 ACGGGTGGATGGCCGGCGACT 1049
          |||||||||||||||||||||
Db   482 ACGGGTGGATGGCCGGCGACT 502

RESULT 7
US-09-433-826B-282
; Sequence 282, Application US/09433826B
; Patent No. 6579973
; GENERAL INFORMATION:
;   APPLICANT: Jiang, Yuqiu
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Harlocker, Susan L.
;   TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.470C4
;   CURRENT APPLICATION NUMBER: US/09/433,826B
;   CURRENT FILING DATE: 1999-11-03
;   NUMBER OF SEQ ID NOS: 474
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-433-826B-282

Query Match   44.7%; Score 499.4; DB 4; Length 502;
Best Local Similarity   99.8%; Pred. No. 1.8e-117;
Matches 500; Conservative   0; Mismatches   1; Indels   0; Gaps   0;

Qy   549 CTGTGCGCAGGAGGAGCCCCTCCCCGGCAGTCTCCCGGCAGTCTCCACCGCAGGGACTGGTGC 608
          |||||||||||||||||||||||||||||

Db   2 CTGTGGGCAGGAGGAGCCCCTCCCCGGCAGTCTCCACCGCAGGGACTGGTGC 61

Qy   609 TTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACTCCACTGA 668
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   62 TTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACTCCACTGA 121

Qy   669 TGGCAAGCTCTTCCCCAGCGATGGTTTCGTGACTGCAAGAAGGGGATCCCAAGCACGG 728
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   122 TGGCAAGCTCTTCCCCAGCGATGGTTTCGTGACTGCAAGAAGGGGATCCCAAGCACGG 181

Qy   729 GAAGCGGAAACGAGGCCGGCCGCCCCGAAAGTGAGCAAAGAGTACTGGGAGG 788
          ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   182 GAAGCGGAAACGAGGCCGGCCGCCCCGAAAGTGAGCAAAGAGTACTGGGAGG 241

Qy   789 CAAGAAGAGCAAGCACGCGCCAGAGAGCCACCCACCTGTGGGAGTTCATCCGGACATCCT 848
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   242 CAAGAAGAGCAAGCACGCGCCAGAGAGCCACCCACCTGTGGGAGTTCATCCGGACATCCT 301

Qy   849 CATCCACCCGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTT 908
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   302 CATCCACCCGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTT 361

Qy   909 CAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGCCAAAGAAAAGAACAGCAA 968
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   362 CAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGCCAAAGAAAAGAACAGCAA 421

Qy   969 CATGACCTACAGAAGCTGAGCCGGCCATGAGGTACTACTACAAACGGGAGATCCTGA 1028
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   422 CATGACCTACAGAAGCTGAGCCGGCCATGAGGTACTACTACAAACGGGAGATCCTGA 481

Qy   1029 ACGGGTGGATGGCCGGCGACT 1049
          |||||||||||||||||||||
Db   482 ACGGGTGGATGGCCGGCGACT 502

RESULT 8
US-09-604-287A-282
; Sequence 282, Application US/09604287A
; Patent No. 6586572
; GENERAL INFORMATION:
;   APPLICANT: Jiang, Yuqiu
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Harlocker, Susan L.
;   APPLICANT: Hepler, William T.
;   TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;   TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
;   FILE REFERENCE: 210121.470C7
;   CURRENT APPLICATION NUMBER: US/09/604,287A
;   CURRENT FILING DATE: 2000-06-22
;   NUMBER OF SEQ ID NOS: 489
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-604-287A-282

Query Match   44.7%; Score 499.4; DB 4; Length 502;
Best Local Similarity   99.8%; Pred. No. 1.8e-117;
Matches 500; Conservative   0; Mismatches   1; Indels   0; Gaps   0;

Qy   549 CTGTGGGCAGGAGGAGCCCCTCCCCGGCAGTCTCCACCGCAGGGACTGGTGC 608
          ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2 CTGTGGGCAGGAGGAGCCCCTCCCCGGCAGTCTCCACCGCAGGGACTGGTGC 61

Qy   609 TTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACTCCACTGA 668
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   62 TTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACTCCACTGA 121

Qy   669 TGGCAAGCTCTTCCCCAGCGATGGTTTCGTGACTGCAAGAAGGGGATCCCAAGCACGG 728
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

```
Db   122 TGGCAAGCTCTTCCCCAGCGATGGTTTCGTGACTGCAAGAAGGGGATCCCAAGCACGG 181

Qy   729 GAAGCGGAAACGAGGACGGCCGGCCGCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGG 788
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   182 GAAGCGGAAACGAGGACGGCCGGCCGCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGG 241

Qy   789 CAAGAAGAGCAAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCGGGACATCCT 848
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   242 CAAGAAGAGCAAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCGGGACATCCT 301

Qy   849 CATCCACCGGAGCTCAACGAGGGGCCTCATGAAGTGGGAGAATCGCATGAAGGGTCTT 908
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   302 CATCCACCCGGAGCTCAACGAGGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGGTCTT 361

Qy   909 CAAGTTCCTGCCGCTCCGAGGTGTGGCCCAACTATGGGCCAAAAGAAAAGAACAGCAA 968
         |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   362 CAAGTTCCTGCCGCTCCCGAGGTGTGGCCCAACTATGGGCCAAAAGAAAAGAACAGCAA 421

Qy   969 CATGAGTACTACTACAAGAAGCTGAGCCGAGGTACTACTACAAGCGGAGATCCTGGA 1028
         ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   422 CATGAGTACTACTACAAGAAGCTGAGCCGAGGTACTACTACAAGCGGAGATCCTGGA 481

Qy  1029 ACGGGTGATGGCCGGCGACT 1049
         ||||||||||||||||||||
Db   482 ACGGGTGATGGCCGGCGACT 502
```

```
Qy   758 TGAGCAAAGAGTACTGGGACTGTCTCGAGGGCAAGAGAGCAAGCACGCGCCCAGAGGCA 817
         ||||||||||||||||||||
Db   450 GAAAAAGGAGCAAGACCCCCTGCCAAGTGCCAAGTGCCACACCAAAAAGCACAACCCGAGAGGGA 391

Qy   818 CCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTCAACGAGGGGCCTCA 877
         |||||||||||||||||
Db   390 CTCACTTATGGGAATTCATCCGGGACATCCTTCTGAACCAGACAAGAACCCAGGATAA 331

Qy   878 TGAAGTGGGAGAATCGGCATGAAGGGTCTTCAAGTTCCTGCCTCCGAGGTGTGGCCC 937
         |||||||||||||||||||||||
Db   330 TAAAATGGGAAGACCGATCTGAGGGGCGTCTTCAGGTTCTTGAAATCAGAGGCAGTGGCTC 271

Qy   938 AACTATGGGGCCAAAAGAAAAGAACAACATGACCTACGAGAAGCTGAGCCGGGCCA 997
         ||||||||||||||||||||||
Db   270 AGCTATGGGTAAAAGAAGGAACACACAGCAGCAGATGACCTATGAAAAGTCAGCCGAGCTA 211

Qy   998 TGAGGTACTACTACAAGCGGGATCCTTGGACACGGGTGGATGGCCGGCGACTCGTCACA 1057
         |||||||||||||
Db   210 TGAGATATTACTACAAAAGAGAAATTCTGGAGCGTGTGCGATGGACGAAGACTGGTATATA 151

Qy  1058 AGTTTGGCAAAACTCAAGCGGCTGGAGAGGAGGAGAA 1094
         ||||||||||||||||||
Db   150 AATTTGGGAAGAATGCCCGAGGATGGGAGAGAAAAATGA 114
```

RESULT 9
US-09-020-956-44/c
; Sequence 44, Application US/09020956
; Patent No. 6261562
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillon, Davin C.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY OF PROSTATE CANCER AND METHODS FO
; NUMBER OF SEQUENCES: 178
; CORRESPONDENCE ADDRESS:
;   ADDRESSEE: SEED and BERRY LLP
;   STREET: 6300 Columbia Center, 701 Fifth Avenue
;   CITY: Seattle
;   STATE: WA
;   COUNTRY: USA
;   ZIP: 98104
; COMPUTER READABLE FORM:
;   MEDIUM TYPE: Floppy disk
;   COMPUTER: IBM PC compatible
;   OPERATING SYSTEM: PC-DOS/MS-DOS
;   SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/09/020,956
;   FILING DATE: 09-FEB-1998
;   CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
;   NAME: Maki, David J.
;   REGISTRATION NUMBER: 31,392
;   REFERENCE/DOCKET NUMBER: 210121.427C2
; TELECOMMUNICATION INFORMATION:
;   TELEPHONE: (206) 622-4900
;   TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 44:
;   SEQUENCE CHARACTERISTICS:
;   LENGTH: 852 base pairs
;   TYPE: nucleic acid
;   STRANDEDNESS: single
;   TOPOLOGY: linear
;   MOLECULE TYPE: cDNA
;   ORIGINAL SOURCE:
;   ORGANISM: Homo sapiens
US-09-020-956-44

Query Match   15.6%; Score 173.8; DB 3; Length 852;
Best Local Similarity 69.7%; Pred. No. 6.5e-35;
Matches 235; Conservative 0; Mismatches 102; Indels 0; Gaps 0;

RESULT 10
US-09-030-607-44/c
; Sequence 44, Application US/09030607
; Patent No. 6262245
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun.
; APPLICANT: Dillon, Davin C.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY OF PROSTATE CANCER AND METHODS FO
; NUMBER OF SEQUENCES: 224
; CORRESPONDENCE ADDRESS:
;   ADDRESSEE: SEED and BERRY LLP
;   STREET: 6300 Columbia Center, 701 Fifth Avenue
;   CITY: Seattle
;   STATE: WA
;   COUNTRY: USA
;   ZIP: 98104
; COMPUTER READABLE FORM:
;   MEDIUM TYPE: Floppy disk
;   COMPUTER: IBM PC compatible
;   OPERATING SYSTEM: PC-DOS/MS-DOS
;   SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/09/030,607
;   FILING DATE: 25-FEB-1998
;   CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
;   NAME: Maki, David J.
;   REGISTRATION NUMBER: 31,392
;   REFERENCE/DOCKET NUMBER: 210121.427C3
; TELECOMMUNICATION INFORMATION:
;   TELEPHONE: (206) 622-4900
;   TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 44:
;   SEQUENCE CHARACTERISTICS:
;   LENGTH: 852 base pairs
;   TYPE: nucleic acid
;   STRANDEDNESS: single
;   TOPOLOGY: linear
;   MOLECULE TYPE: cDNA
;   ORIGINAL SOURCE:
;   ORGANISM: Homo sapiens
US-09-030-607-44

Query Match   15.6%; Score 173.8; DB 3; Length 852;
Best Local Similarity 69.7%; Pred. No. 6.5e-35;
Matches 235; Conservative 0; Mismatches 102; Indels 0; Gaps 0;

RESULT 11
US-09-439-313-44/c
; Sequence 44, Application US/09439313
; Patent No. 6329505
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Harlocker, Susan Louise
; APPLICANT: Jiang, Yuqui
; APPLICANT: Reed, Steven G.
; APPLICANT: Kalos, Michael
; APPLICANT: Fanger, Gary
; APPLICANT: Retter, Mark
; APPLICANT: Solk, John
; APPLICANT: Day, Craig
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF PROSTATE CANCER
; FILE REFERENCE: 210121.427C9
; CURRENT APPLICATION NUMBER: US/09/439,313
; CURRENT FILING DATE: 1999-11-12
; NUMBER OF SEQ ID NOS: 575
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 44
; LENGTH: 852
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(852)
; OTHER INFORMATION: n = A,T,C or G
US-09-439-313-44

Query Match   15.6%;   Score 173.8; DB 4; Length 852;
Best Local Similarity   69.7%;   Pred. No. 6.5e-35;
Matches 235; Conservative   0; Mismatches 102; Indels   0; Gaps   0;

Qy   758 TGAGCAAGAGTACTGGGACTGTCTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCA 817
             || ||| ||||||| | ||||||||||||| ||||| ||||||| |||||||||
Db   450 TGAAAAGGAGCAAGACCCCCTGCCAAGTGCCACACCAAAAAGCACAACCCGAGAGGGA 391

Qy   818 CCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTCAAGAGGGCCTCA 877
             |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   390 CTCACTTATGGGAATTCATCCGCGACATCCTCTTGAACCCGACAAGAACCCAGGATTAA 331

Qy   878 TGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGCCC 937
             ||||||||||| || |||||||||||||||||||||||||||||||||||||||
Db   330 TAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAGGCAGTGGCTC 271

Qy   938 AACTATGGGGCCAAAAGAAAAAGAAGAAGACAACAGCAGCAGCATGACCTACGAGAAGCTGAGCCGGGCCA 997
             ||||||||||||| ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   270 AGCTATGGGGTAAAAGAAATAGAACAACAGCAGCATGACCTACGAGAAGCTCAGCCGAGCTA 211

Qy   998 TGAGGTACTACAAACGCAGGATCCTGGAACGGGTGATGGCCGGCGACTCGTCTCACA 1057
             |||||||||||||| |||||||||||||||||||||||||||||||||||||||||
Db   210 TGAGATATTACTACAAAAGAGACGAAGAAATTCTGGAGCGTGTGGATGGACGAAGACTGGTATATA 151

Qy 1058 AGTTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGA 1094
              |||||||||||||||||||||||||||||||||||
Db   150 AATTTGGGAAGAATGCCCGAGGATGGAGAGAAAATGA 114

RESULT 12
US-09-352-616A-44/c
; Sequence 44, Application US/09352616A
; Patent No. 6395278
; GENERAL INFORMATION:
; APPLICANT: Dillon, Davin C.
; APPLICANT: Harlocker, Susan Louise
; APPLICANT: Jiang, Yuqui
; APPLICANT: Xu, Jiangchun
; APPLICANT: Mitcham, Jennifer Lynn
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF PROSTATE CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.427C8
; CURRENT APPLICATION NUMBER: US/09/352,616A
; CURRENT FILING DATE: 1999-07-13
; NUMBER OF SEQ ID NOS: 472
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 44
; LENGTH: 852
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(852)
; OTHER INFORMATION: n = A,T,C or G
US-09-352-616A-44

Query Match   15.6%;   Score 173.8; DB 4; Length 852;
Best Local Similarity   69.7%;   Pred. No. 6.5e-35;
Matches 235; Conservative   0; Mismatches 102; Indels   0; Gaps   0;

Qy   758 TGAGCAAGAGTACTGGGACTGTCTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCA 817
             || ||| ||||||| | ||||||||||||| ||||| ||||||| |||||||||
Db   450 TGAAAAGGAGCAAGACCCCCTGCCAAGTGCCACACCAAAAAGCACAACCCGAGAGGGA 391

Qy   818 CCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCA 877
             |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   390 CTCACTTATGGGAATTCATCCGCGACATCCTCTTGAACCCGACAAGAACCCAGGATTAA 331

Qy   878 TGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCC 937
             ||||||||||| || |||||||||||||||||||||||||||||||||||||||
Db   330 TAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAGGCAGTGGCTC 271

Qy   938 AACTATGGGGCCAAAAGAAAAAGAAGAAGACAACAGCAGCAGCATGACCTACGAGAAGCTGAGCCGGGCCA 997
             ||||||||||||| ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   270 AGCTATGGGGTAAAAGAAATAGAACAACAGCAGCATGACCTACGAGAAGCTCAGCCGAGCTA 211

Qy   998 TGAGGTACTACAAACGCAGGATCCTGGAACGGGTGATGGCCGGCGACTCGTCTCACA 1057
             |||||||||||||| |||||||||||||||||||||||||||||||||||||||||
Db   210 TGAGATATTACTACAAAAGAGACGAAGAAATTCTGGAGCGTGTGGATGGACGAAGACTGGTATATA 151

Qy 1058 AGTTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGA 1094
              |||||||||||||||||||||||||||||||||||
Db   150 AATTTGGGAAGAATGCCCGAGGATGGAGAGAAAATGA 114

RESULT 13
US-09-232-149A-44/c
; Sequence 44, Application US/09232149A

; Patent No. 6465611
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer Lynn
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY OF PROSTATE
; TITLE OF INVENTION: CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.42706
; CURRENT APPLICATION NUMBER: US/09/232,149A
; CURRENT FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 338
; SOFTWARE: FastSEQ for Windows Version 3.0
;
; SEQ ID NO 44
;
; LENGTH: 852
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(852)
; OTHER INFORMATION: n = A,T,C or G
US-09-232-149A-44

Query Match   15.6%; Score 173.8; DB 4; Length 852;
Best Local Similarity   69.7%; Pred. No. 6.5e-35;
Matches   235; Conservative   0; Mismatches 102; Indels   0; Gaps   0;

Qy   758 TGAGCAAAGAGTACTGGGACTGTCTCGAGGCAAGAAGAGCAAGCACGCGCCCAGAGGCA 817
              ||||||||||||||||||| ||||||||||||||||||||||||| | ||||||||||
Db   450 TGAAAAGGAGCAAGACCCCCGCCAAGTGCCACACACAAAAGCACAACCCGAGAGGGA 391

Qy   818 CCCACCTGTGGGAGTTCATCCGGGACATCTCATCCCACCCGGGAGTCAACGAGGGCCTCA 877
              |||||||||||||||||||| ||||||||||||||||| ||||||||||||||||||||
Db   390 CTCACTTATGGGAATTCATCCGCGACATCTCTTGAACCCAGACAACAGAACCCAGGATTAA 331

Qy   878 TGAAGTGGGAGAATCGGCATGAGAGGCGTCTTCAAGTTCCTGCGCCTCCGAGGCTGTGGCCC 937
              ||||||||||||||||||||||| ||||||||||| ||| || |||||||||| ||||||
Db   330 TAAAATGGGAAGACCGATCTCGAGGGCGTCTTGAAATCAGAGGCAGTGGCTC 271

Qy   938 AACTATGGGCCAAAAGAAAAGAACAACATGACCTACGAGAGCTGAGCCGGGCCA 997
              ||||||||||||||||||||||||||||||||||| ||||||||||||||||||||
Db   270 AGCTATGGGGTAAAAGAAAAGAAGAACAACAGCAGCATGACCCCAGCCTA 211

Qy   998 TGAGGTACTACTACAAACGGGAGATCCGGCCGACTCGTCTCACA 1057
              |||||||||||||||||||||||||||||||||||| |||||||||||
Db   210 TGAGATATTACTACAAAAGAGAAATACTGGAGCGGTGTGGATGGCCGGAGACTCGTATATA 151

Qy   1058 AGTTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAGGA 1094
              ||||||||||||||| |||||||||||||||||||||||
Db   150 AATTTGGGAAGAATGCCCGAGGATGGAGAGAAAATGA 114

RESULT 14
US-09-009-913-2
; Sequence 2, Application US/09009913
; Patent No. 6087485
; GENERAL INFORMATION:
; APPLICANT: AxyS Pharmaceuticals, Inc.
; TITLE OF INVENTION: Asthma Related Genes
; NUMBER OF SEQUENCES: 339
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bozicevic & Reed, LLP
; STREET: 285 Hamilton Ave, Suite 200
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94301
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/009,913

; FILING DATE: 21-JAN-1998
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Sherwood, Pamela J
; REGISTRATION NUMBER: 36,677
; REFERENCE/DOCKET NUMBER: SEQ-4P
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-327-3231
; TELEFAX: 650-327-3231
; TELEX:
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 5427 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-09-009-913-2

Query Match   15.6%; Score 173.8; DB 3; Length 5427;
Best Local Similarity   69.7%; Pred. No. 1.1e-34;
Matches   235; Conservative   0; Mismatches 102; Indels   0; Gaps   0;

Qy   758 TGAGCAAAGAGTACTGGGACTGTCTCGAGGCAAGAAGAGCAAGCACGCGCCCAGAGGCA 817
              ||||||||||||||||||| ||||||||||||||||||||||||| | ||||||||||
Db   709 TGAAAAGGAGCAAGACCCCCGCCAAGTGCCACACACAAAAGCACAACCCGAGAGGGA 768

Qy   818 CCCACCTGTGGGAGTTCATCCGGGACATCTCATCCCACCCGGGAGTCAACGAGGGCCTCA 877
              |||||||||||||||||||| ||||||||||||||||| ||||||||||||||||||||
Db   769 CTCACTTATGGGAATTCATCCGCGACATCTCTTGAACCCAGACAACAGAACCCAGGATTAA 828

Qy   878 TGAAGTGGGAGAATCGGCATGAGAGGCGTCTTCAAGTTCCTGCGCCTCCGAGGCTGTGGCCC 937
              ||||||||||||||||||||||| ||||||||||| ||| || |||||||||| ||||||
Db   829 TAAAATGGGAAGACCGATCTCGAGGGCGTCTTGAAATCAGAGGCAGTGGCTC 888

Qy   938 AACTATGGGCCAAAAGAAAAGAACAACATGACCTACGAGAGCTGAGCCGGGCCA 997
              ||||||||||||||||||||||||||||||||||| ||||||||||||||||||||
Db   889 AGCTATGGGGTAAAAGAAAAGAAGAACAACAGCAGCATGACCCCAGCCTA 948

Qy   998 TGAGGTACTACTACAAACGGGAGATCCGGCCGACTCGTCTCACA 1057
              |||||||||||||||||||||||||||||||||||| |||||||||||
Db   949 TGAGATATTACTACAAAAGAGAAATACTGGAGCGGTGTGGATGGCCGGAGACTCGTATATA 1008

Qy   1058 AGTTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAGGA 1094
              ||||||||||||||| |||||||||||||||||||||||
Db   1009 AATTTGGGAAGAATGCCCGAGGATGGAGAGAAAATGA 1045

RESULT 15
US-09-009-913-3
; Sequence 3, Application US/09009913
; Patent No. 6087485
; GENERAL INFORMATION:
; APPLICANT: AxyS Pharmaceuticals, Inc.
; TITLE OF INVENTION: Asthma Related Genes
; NUMBER OF SEQUENCES: 339
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bozicevic & Reed, LLP
; STREET: 285 Hamilton Ave, Suite 200
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94301
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/009,913

```
        FILING DATE:  21-JAN-1998
        CLASSIFICATION:
     PRIOR APPLICATION DATA:
        APPLICATION NUMBER:
        FILING DATE:
     ATTORNEY/AGENT INFORMATION:
        NAME:  Sherwood, Pamela J
        REGISTRATION NUMBER:  36,677
        REFERENCE/DOCKET NUMBER:  SEQ-4P
     TELECOMMUNICATION INFORMATION:
        TELEPHONE:  650-327-3231
        TELEFAX:  650-327-3231
        TELEX:
INFORMATION FOR SEQ ID NO:  3:
     SEQUENCE CHARACTERISTICS:
        LENGTH:  5510 base pairs
        TYPE:  nucleic acid
        STRANDEDNESS:  double
        TOPOLOGY:  linear
     MOLECULE TYPE:  cDNA
US-09-009-913-3
```

```
Query Match        15.6%;  Score 173.8;  DB 3;  Length 5510;
Best Local Similarity  69.7%;  Pred. No. 1.1e-34;
Matches  235;  Conservative  0;  Mismatches  102;  Indels  0;  Gaps  0;

Qy    758 TGAGCAAAGAGTACTGGGACTGTCTCGAGGGCAAGAAGAGCAAGCACCGCCCCAGAGGCA 817
          |||| ||||  |||| | ||||||||  || | || || ||||| || |||||||||||
Db    792 TGAAAAAGGAGCAAGACCCCCCCTGCCAAGTGCCACACCAAAAAGCACAACCCGAGAGGGA 851

Qy    818 CCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCA 877
          ||||| | || ||||| ||||| |||||| |||| ||| ||||||  ||| |||||||
Db    852 CTCACTTATGGGGAATTCATCCGCGACATCCTCTTTGAACCCAGACAAGAACCCAGATTAA 911

Qy    878 TGAAGTGGGAGAATGCGGCATGAAGGCGTCTTCAAGTTCCTGCGCCTCCGAGGCTGTGGCCC 937
          |||| || || ||   | ||| || ||  ||||| || ||| || |  |||||||||
Db    912 TAAAATGGGGAAGACCGATCTGAGGCGGTCGTCTTCAGGTTCTTGAAATCAGAGGCAGTGGCTC 971

Qy    938 AACTATGGGCCAAAAGAAAAAGAACACAGCAAACATGACCTACGAGAAGCTGAGCCGGGCCA 997
          | ||||| || ||  ||| ||||| |||| ||| ||| || || ||| |||||||||||
Db    972 AGCTATGGGGGTAAAAGAGGTAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCTCAGCCGAGCTA 1031

Qy    998 TGAGGTACTACTACAAACGGAGATCCTGGAACGGGTGAGCCGGCCGACTCGTCTCACA 1057
          |||| ||| ||||  |||| | ||| |||  | |||  || ||  ||| | ||| ||
Db   1032 TGAGATATTACTACAAAAGAGAAATACTGGAGCCGTGTCGGAGCGTGTCGGATGGACGAAGACTGGTATATA 1091

Qy   1058 AGTTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGA 1094
          ||||| |||||| ||| ||||| ||||  |||||||
Db   1092 AATTTGGGAAGAATGCCCGAGGATGGGAGAGAAAATGA 1128
```

```
Search completed: February 13, 2004, 01:54:40
Job time : 65.1925 secs
```

GenCore version 5.1.6

Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - nucleic search, using frame_plus_p2n model

Run on: February 12, 2004, 21:34:51 ; Search time 583.817 Seconds
(without alignments)
2334.540 Million cell updates/sec

Title: US-08-978-217-16_COPY_2_371
Perfect score: 1980
Sequence: 1 AATCEISNVFSNYFNAMYSS.........YKFGKNSSGWKEEVGESRN 370

Scoring table: BLOSUM62
Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 2449703 seqs, 1841816367 residues

Total number of hits satisfying chosen parameters: 4899406

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Command line parameters:
-MODEL=frame+_p2n.model -DBV=xlh
-Q=/cgn1/USPTO_spool/US08978217/runat_10022004_133827_20514/app_query.fasta_1.1500
-DB=Published Applications_NA -QFMT=fastap -SUFFIX=rnpb -MINMATCH=0.1
-LOOPCL=0 -LOOPBX=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=200000000 -USER=US08978217 @CGN_1_690 @runat_10022004_133827_20514
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Published Applications_NA:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq2:*
14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
16: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
17: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
18: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	%	Query Match Length		DB ID	Description
	1	1707	86.2	1907	15	US-10-097-340-74	Sequence 74, Appl
	2	1707	86.2	1915	10	US-09-964-824A-101	Sequence 101, App
	3	1707	86.2	1915	10	US-09-964-824A-563	Sequence 563, App
	4	1707	86.2	1915	10	US-09-880-107-3420	Sequence 3420, Ap
	5	1707	86.2	1915	10	US-09-967-768A-192	Sequence 192, App
	6	1707	86.2	1917	9	US-09-922-217-1105	Sequence 1105, Ap
	7	1707	86.2	1917	14	US-10-025-380-1105	Sequence 1105, App
	8	1707	86.2	1956	12	US-10-264-049-756	Sequence 756, App
	9	1707	86.2	1996	9	US-09-925-301-207	Sequence 207, App
	10	1458.5	73.7	2269	12	US-10-131-410-64	Sequence 64, Appl
c	11	928.5	46.9	626	9	US-09-922-217-853	Sequence 853, App
c	12	928.5	46.9	626	10	US-09-833-263-853	Sequence 853, App
c	13	928.5	46.9	626	14	US-10-025-380-853	Sequence 853, App
c	14	833.5	42.1	563	10	US-09-922-217-944	Sequence 944, App
c	15	833.5	42.1	563	14	US-10-025-380-944	Sequence 944, App
c	16	833.5	42.1	563	14	US-09-604-287A-282	Sequence 282, App
	17	803	40.6	502	10	US-09-339-338-282	Sequence 282, App
	18	803	40.6	502	10	US-09-551-621-282	Sequence 282, App
	19	803	40.6	502	11	US-09-124-805-282	Sequence 282, App
	20	803	40.6	502	13	US-10-007-805-282	Sequence 282, App
	21	803	40.6	502	14	US-10-076-622-282	Sequence 282, App
	22	803	40.6	502	10	US-09-998-598-2290	Sequence 2290, Ap
c	23	765	38.6	499	15	US-09-925-297-309	Sequence 309, App
	24	590.5	29.8	1426	9	US-10-106-698-935	Sequence 935, App
	25	590.5	29.8	1426	15	US-09-764-864-320	Sequence 320, Ap
	26	585	29.5	1429	10	US-09-998-598-2216	Sequence 2216, Ap
c	27	550.5	27.8	437	10	US-09-759-143-44	Sequence 44, Appl
	28	543	27.4	852	9	US-09-780-669-44	Sequence 44, Appl
	29	543	27.4	852	9	US-09-030-606-44	Sequence 44, Appl
	30	543	27.4	852	9	US-09-822-827-44	Sequence 44, Appl
	31	543	27.4	852	9	US-09-115-453-44	Sequence 44, Appl
	32	543	27.4	852	10	US-09-232-880-44	Sequence 44, Appl
	33	543	27.4	852	10	US-09-895-793-44	Sequence 44, Appl
	34	543	27.4	852	10	US-09-895-814-44	Sequence 44, Appl
	35	543	27.4	852	13	US-10-144-678A-44	Sequence 44, Appl
	36	543	27.4	852	13	US-10-294-025-44	Sequence 44, Appl
	37	543	27.4	852	14	US-10-012-896-44	Sequence 44, Appl
	38	543	27.4	852	15	US-10-010-940-44	Sequence 44, Appl
	39	543	27.4	355	15	US-09-867-701-1818	Sequence 4818, Ap
	40	527.5	26.6	355	12	US-10-292-798-1601	Sequence 1601, Ap
c	41	483.5	24.4	1435	13	US-10-017-161-1953	Sequence 1953, Ap
c	42	483.5	24.4	1435	10	US-09-974-298-12	Sequence 12, Appl
	43	442	22.3	5045	15	US-10-060-036-3261	Sequence 3261, Ap
	44	435.5	22.0	275	12	US-10-282-596-203	Sequence 203, App
	45	435.5	22.0	1898	12		

ALIGNMENTS

RESULT 1
US-10-097-340-74
; Sequence 74, Application US/10097340
; Publication No. US20030087250A1
; GENERAL INFORMATION:
; APPLICANT: John MONAHAN
; APPLICANT: Manjula GANNAVARAPU
; APPLICANT: Sebastian HOERSCH
; APPLICANT: Shubhangi KAMATKAR
; APPLICANT: Steve G. KOVATS
; APPLICANT: Rachel E. MEYERS
; APPLICANT: Michael MORRISEY
; APPLICANT: Peter OLANDT
; APPLICANT: Ami SEN
; APPLICANT: Peter VEIBY
; APPLICANT: Gordon B. MILLS
; APPLICANT: Robert C. BAST, Jr.
; APPLICANT: Karen LU
; APPLICANT: Rosemarie SCHMANDT
; APPLICANT: Xumei ZHAO
; APPLICANT: Karen GLATT
; TITLE OF INVENTION: Nucleic Acid Molecules and Proteins For The Identification,
; TITLE OF INVENTION: Prevention, and Therapy of Ovarian Cancer
; FILE REFERENCE: MRI-030

; CURRENT APPLICATION NUMBER: US/10/097,340
; CURRENT FILING DATE: 2002-03-14
; PRIOR APPLICATION NUMBER: 60/276,025
; PRIOR FILING DATE: 2001-03-14
; PRIOR APPLICATION NUMBER: 60/325,149
; PRIOR FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: 60/276,026
; PRIOR FILING DATE: 2001-03-14
; PRIOR APPLICATION NUMBER: 60/324,967
; PRIOR FILING DATE: 2001/09/26
; PRIOR APPLICATION NUMBER: 60/311,732
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: 60/325,102
; PRIOR FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: 60/323,580
; PRIOR FILING DATE: 2001-09-19
; NUMBER OF SEQ ID NOS: 363
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 74
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-097-340-74

Alignment Scores:
Pred. No.:   1.18e-189
Score: 1707.00
Percent Similarity: 92.72%
Best Local Similarity: 86.79%
Query Match: 86.21%
DB: 15

Length: 1907
Matches: 322
Conservative: 22
Mismatches: 25
Indels: 2
Gaps: 2

US-08-978-217-16_COPY_2_371 (1-370) x US-10-097-340-74 (1-1907)

Qy   1 AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer 20
           ::::: |||| ||:::||
Db   99 GCTGCAACCTGCGAGATTAGCAACATTTTAGCAACACTTCAGTGCGATGTACAGCTCG 158

Qy   21 GluAspProThrLeuAlaProAlaProPro---ThrThrPheGlyThrGluAspLeuVal 39
           ::|||||||
Db   159 GAGGACTTCCACCCTGGCCTCGTTCCCCCTGCTCCCCTTGGGGCCGATGACTTGGTA 218

Qy   40 LeuThrLeuAsnAsnGlnGlnMetThrLeuGluGlyProGluLysAlaSerTrpThrSer 59
           ||::||:::|| || |||
Db   219 CTGACCCTGAGCAACCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTCGTTGGGG 278

Qy   60 GluArgProGlnPheTrpSerLysThrGlnValLeuGluThrGlyGlnValGlu 79
           ||:|| ||| ||:::|||
Db   279 GAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGAGACCGGCCAGGTGGAG 338

Qy   80 LysAsnAspTyrAspAlaSerIleAspPheSerArgCysAsnMetAspGlyAlaThr 99
           ||:::||| ||:::|||
Db   339 AAGAACAAGTACGACGCGAGCATTGACTTCTCACGATGTGACATGGATGGGCCCACC 398

Qy   100 LeuCysSerCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeu 119
           ||::: ||| ||:::|||
Db   399 CTCTGCAATTGTGCCCTGGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTC 458

Qy   120 HisAlaGlnLeuArgAspAspThrSerAsnSerAspGluLeuSerTrpIleIleGlu 139
           ||::: ||| |||
Db   459 CATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCGATGAGCTCAGTTGGATCATTGAG 518

Qy   140 LeuLeuGluLysAspGlyMetSerPheGlnGluSerLeuGlyLeuGlyLeuGlyLeuGlyLeuGlyProPheAsp 159
           ||| ||| |||
Db   519 CTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTA---GACCCAGGGCCCTTTGAC 575

Qy   160 GlnGlySerProPheAlaGlnLeuLeuLeuAspAspAlaGlyGlnArgGlnAlaSerProTyrTyr 179
           ||| :::||| |||
Db   576 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGCGGTCAGCAAGCCAGCCCCCTACCAC 635

Qy   180 CysSerThrTyrGlyProGlyAlaProSerProGlyValSerArgThrAlaArg 199
           :::
Db   636 CCCGGCCAGCTGTGGCGCGGAGGAGCCCCCCCCTGGGCAGCTCTTCCACCCGCAGGG 695

Alignment Scores:
Pred. No.:   1.19e-189
Score: 1707.00
Percent Similarity: 92.72%
Best Local Similarity: 86.79%
Query Match: 86.21%
DB: 10

Length: 1915
Matches: 322
Conservative: 22
Mismatches: 25
Indels: 2
Gaps: 2

US-08-978-217-16_COPY_2_371 (1-370) x US-09-964-824A-101 (1-1915)

Qy   1 AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer 20

Qy   200 ThrAlaThrProGlnSerHisAlaSerArgSerGlyGlySerAspValAspLeuAsp 219
Db   696 ACTGGTGTTCTGGAGTCCCACTCCTGGAGTCCCGTGGGAGTGACGTGACCTGGAT 755

Qy   220 LeuThrGluSerLysValPheProArgAspPheThrArgProTyrArgLysGlyGlyGluPro 239
           |:::|| :::||
Db   756 CCCACTGATGGCAAGTCTTCCCCAGCGATGGTTTTCGTGACTGACGAGGGGGGATCCC 815

Qy   240 LysHisGlyLysArgLysArgGlyArgProArgArgLysLysGluTyrTyrTrpAspCys 259
Db   816 AAGCACGGGGAAGCGGAAACGAGGCCGGCCCGAAAGGTGAGCAAAGTACTGGGGACTGT 875

Qy   260 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 279
Db   876 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 935

Qy   280 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 299
Db   936 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 995

Qy   300 GlyValPheLeuLysPheArgSerGluAlaValAlaGlnLeuTrpGlyLeuTyrLysLys 319
Db   996 GGGCTCTTCAAGTTCCTGCGCTCCGAGCTGTGGCCCAACTATGGGCCAAAAGAAAAG 1055

Qy   320 AsnSerAsnMetThrTyrGluLysSerArgAlaMetArgTyrTyrLysTyrArgGlu 339
Db 1056 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1115

Qy   340 IleLeuGluArgValAspGlyGlyArgLeuValTyrLysPheGlyLysAsnSerGly 359
Db 1116 ATCCTGGAACGGGTGGATGGCGGCCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1175

Qy   360 TrpLysGluGlnValGlyGlyValGlyGluSerArgAsn 370
           |||
Db 1176 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1208

Db   1200 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1232

RESULT 3
US-09-964-824A-563
; Sequence 563, Application US/09964824A
; Patent No. US2002010253lA1
; GENERAL INFORMATION:
;   APPLICANT: Horrigan, Stephen
;   TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signat
;   TITLE OF INVENTION: Sets
;   FILE REFERENCE: 689290-73
;   CURRENT APPLICATION NUMBER: US/09/964,824A
;   CURRENT FILING DATE: 2001-09-27
;   PRIOR APPLICATION NUMBER: US/60/236,033
;   PRIOR FILING DATE: 2000-09-28
;   PRIOR APPLICATION NUMBER: US/60/236,032
;   PRIOR FILING DATE: 2000-09-28
;   PRIOR APPLICATION NUMBER: US/60/236,028
;   PRIOR FILING DATE: 2000-09-28
;   NUMBER OF SEQ ID NOS: 583
;   SOFTWARE: PatentIn version 3.0
; SEQ ID NO 563
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-964-824A-563

Alignment Scores:
Pred. No.:   1.19e-189
Score: 1707.00
Percent Similarity: 92.72%
Best Local Similarity: 86.79%
Query Match: 86.21%
DB:

Length: 1915
Matches: 322
Conservative: 22
Mismatches: 25
Indels: 2
Gaps: 2

US-08-978-217-16_COPY_2_371 (1-370) x US-09-964-824A-563 (1-1915)

Qy   1 AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer 20
           |||||||||||||||||||||||||||||||:::||||:::||||||||||||||
Db   123 GCTGCAACCTGTGAGATTAGCAACAATTTTAGCAACACTACTTCAGTGCGATGTACAGCTCG 182

Qy   21 GluAspProThrLeuAlaProAlaPro---ThrThrPheGlyThrGluAspLeuVal 39
           |||||||||:|||| :::||||||||||||||||||||||
Db   183 GAGGACTCCACCCTGCCTCTGTTCCCCCTGCTCCCCCGTCCCACCTTTGGGGCCGATGACTTGGTA 242

Qy   40 LeuThrLeuAsnAsnGlnGlnMetThrLeuGluGlyProGlulysAlaSerTrpThrSer 59
           :|||||||||||||||||||||:::||||||||||||||||||||
Db   243 CTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAGGCCAGCTGGTTGGGG 302

Qy   60 GluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpGlnValGlu 79
           |||:::||||||||||||||||||:::|||||||||||||||||
Db   303 GAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTACCAAGTGGAG 362

Qy   80 LysAsnLysTyrAspAlaSerIleAspPheSerArgCysAsnMetAspGlyAlaThr 99
           ||||||||||||||||:::||||||||||||||||||||||||
Db   363 AAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGCAATGGATGGCGCCACC 422

Qy   100 LeuCysSerCysAlaAlaLeuGluGluLeuArgLeuValPheLeuGlyProLeuGlyAspGlnLeu 119
           ||::|||||||||||||||||||||||||:::||:::||||||||||||||
Db   423 CTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTCTTGGGCCTCTGGGGGACCAACTC 482

Qy   120 HisAlaGlnLeuArgAspAspLeuThrSerAsnSerAspGluLeuSerTrpIleIleGlu 139
           |||||||||||||||:::||||||||||||:::||||||||||||||
Db   483 CATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAG 542

Qy   140 LeuLeuGluLysAspGlyMetSerPheGlnGluSerLeuGlyLysAspLeuGlyProAsp 159
           ||||||||||||||||||||||||||| |||:::||||||||||||
Db   543 CTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGTCT---GACCCAGGGCCCTTTGAC 599

Qy   160 GlnGlySerProPheAlaGlnLeuLeuLeuAspSerGlyArgGlnAlaSerProTyrTyr 179
           |||||||||||||||:::||||||:::||||||||||||||||||
Db   600 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACAGCGGTCAGCAAGCCAGCCCCTACCAC 659

DB:

US-08-978-217-16_COPY_2_371 (1-370) x US-09-880-107-3420 (1-1915)

```
                           10                  Gaps:        2

Qy      1 AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer   20
            ||||||||||||||||||||||||||||||||||||||||||||||||||
Db    123 GCTGCAACCTGTGAGATTAGCAACATTTTAGCAACTACTTCAGTGCGATGTACAGCTCG   182

Qy     21 GluAspProThrLeuAlaProAlaPro---ThrThrPheGlyThrGluAspLeuVal      39
            |||||||||||||||||||||||||   :::||||||||||||||||||||||
Db    183 GAGGACTGCAACCTGGCCTGCCCTGTTCCCCTGCTCCACCTTTGGGGCCGATGACTTGGTA  242

Qy     40 LeuThrLeuAsnAsnGlnGlnMetThrLeuGluGluLysGlyLysAlaSerTrpThrSer   59
            ||||||||||||||||||||||||||||||||||||||||||||||||||
Db    243 CTGACCCTGAACAACCCCAGATGTCATTGGAGGGTACAGAGAAGGGCAGCTCGTTGGGG   302

Qy     60 GluArgProGlnPheTrpSerLysThrGlnValLeuGluTyrTyrGlnValGlu        79
            ||||||||||||||||||||||||||||||||||||||||||||||||||
Db    303 GAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGAGTACTACCAAGTGGAG   362

Qy     80 LysAsnLysTyrAspAlaSerSerIleAspPheSerArgCysAsnMetAspGlyAlaThr   99
            |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    363 AAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCCACC  422

Qy    100 LeuCysSerCysAlaLeuGluGluLeuArgLeuValPheGlyLyeProLeuGlnGlnLeu  119
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    423 CTCTTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGGCCTTCTGGGGACCAACTC  482

Qy    120 HisAlaGlnLeuArgAspLeuThrSerAsnSerArgGluLeuSerTrpIleIleGlu    139
            ||||||||||||||||||||||||||||::|||||||||||||||||||||||
Db    483 CATGCCCAGCTGCGAGACCTGACTTCCAGCTCTTCTGATGAGTCAGTTGGATCATTGAG  542

Qy    140 LeuLeuLysAspGlyMetSerPheGluGlySerLeuGlyAspLeuGlyProPheAsp    159
            ::||||||||||||||||||||||||||||||||||     ||||||||||
Db    543 CTGCTGGAGAAGGATGGCATGGCCTTCGAGGAGCCCTA--GACCCAGGGCCCTTTGAC   599

Qy    160 GlnGlySerProPheAlaGlnLeuLeuLeuAspGlyArgGlnAlaSerProTyrTyr    179
            ||||||||||||||||||||||||||||||||||||||::|||||||||||||
Db    600 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGAGCGGTCAGCAAGCCCCTACCAC  659

Qy    180 CysSerThrTyrGlyProGlySerProGlySerSerAspValSerThrAlaArg   199
            |||||||||||||||||||||||||||||||||||||||||||||||||||
Db    660 CCCGGCAGCTGTGGCGCAGGAGCCCCTCCCCTGGCAGCTCTGACGTCTCCACGCAGGG  719

Qy    200 ThrAlaThrProGlnSerHisAlaSerArgGlyGlySerAspValAspLeuAsp    219
            :::||||||||||||||||||||||||||||||||||||||||||||||||
Db    720 ACTGGTGCTTCTCCGAGCTCCACTCCTCAGACTCCGGTGAAGTGACGTGGACCTGGAT   779

Qy    220 LeuThrGluSerLysValPheProArgAspAspPheThrArgLysTyrLysGlyGluPro  239
            ||||||:::||||||||||||||||||||||||||::|||||||||||||||||
Db    780 CCCACTGATGCGAAGGCAAGCTCTTCCCAGCGATGGTTTCGTGACTGCAAGAAGGGGGATCCC  839

Qy    240 LysHisGlyLysLysSerLysHisAlaProArgGlyTyrLysSerLysLysTrpAspCys  259
            |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    840 AAGCACGGGAAGAAGAGCAAGCACGCCCCGAAAGGCTGAGCAAAGAGTACTGGGACTGT   899

Qy    260 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg  279
            ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    900 CTCGAGGGCAAGAAGAGCAAGCACGCCCCGAGGGGCCTCAACGAGTGGGAGATCCGGATG  959

Qy    280 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu  299
            ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    960 GACATCCTCATCCACCCGGAGCTCAACGAGGGGCTCATGAAGTGGGAGAATCGGCATGAA  1019

Qy    300 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpProGlnLysLysLys  319
            |||||||||||||||||||||||::||||||||||||||||||||||||||||
Db   1020 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGGCCAAAGAAAAG  1079

Qy    320 AsnSerAsnMetThrTyrGluLysSerGluAlaMetArgTyrTyrLysTyrArgGlu    339
            |||||||||||||||||||||::|||||||||||||||||||||||||||||
Db   1080 AACAGCAACATGACCTACGAAAGCTCAGAGGCCATGAGGTACTACAAACGGCAGGAG  1139

Qy    340 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly  359
            |||||||||||||||||||||||||||||||||||||||||||||||||||||
```

Qy   180 CysSerThrTyrGlyProGlySerProGlySerSerAspValSerThrAlaArg   199
```
Db    660 CCCGGCAGCTGTGGCGCAGGAGCCCCTCCCCTGGCAGCTCTGACGTCTCCACGCAGGG   719

Qy    200 ThrAlaThrProGlnSerHisAlaSerArgGlyGlySerAspValAspLeuAsp   219
Db    720 ACTGGTGCTTCTCCGAGCTCCACTCCTCAGACTCCGGTGAAGTGACGTGGACCTGGAT   779

Qy    220 LeuThrGluSerLysValPheProArgAspAspPheThrArgLysTyrLysGlyGluPro  239
Db    780 CCCACTGATGCGAAGGCAAGCTCTTCCCAGCGATGGTTTCGTGACTGCAAGAAGGGGGATCCC  839

Qy    240 LysHisGlyLysLysSerLysHisAlaProArgGlyTyrLysSerLysLysTrpAspCys  259
Db    840 AAGCACGGGAAGAAGAGCAAGCACGCCCGGAAAGGCTGAGCAAAGAGTACTGGGACTGT   899

Qy    260 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg  279
Db    900 CTCGAGGGCAAGAAGAGCAAGCACGCCCCGAGGGGCCTCAACGAGTGGGAGATCCGGATG  959

Qy    280 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu  299
Db    960 GACATCCTCATCCACCCGGAGCTCAACGAGGGGCTCATGAAGTGGGAGAATCGGCATGAA  1019

Qy    300 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpProGlnLysLysLys  319
Db   1020 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGGCCAAAGAAAAG  1079

Qy    320 AsnSerAsnMetThrTyrGluLysSerGluAlaMetArgTyrTyrLysTyrArgGlu    339
Db   1080 AACAGCAACATGACCTACGAAAGCTCAGAGGCCATGAGGTACTACAAACGGCAGGAG   1139

Qy    340 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly  359
Db   1140 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTTCTCACAGTTTGGCAAAAACTCAAGCGGC  1199

Qy    360 TrpLysGluGluGluGlyGlyGluSerArgAsn  370
Db   1200 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGAAC   1232
```

RESULT 4
US-09-880-107-3420
; Sequence 3420, Application US/09880107
; Patent No. US2002142981A1
; GENERAL INFORMATION:
; APPLICANT: Horne, Darci T.
; APPLICANT: Vockley, Joseph G.
; APPLICANT: Scherf, Uwe
; APPLICANT: Gene Logic, Inc.
; TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
; FILE REFERENCE: 44921-5028-WO
; CURRENT APPLICATION NUMBER: US/09/880,107
; CURRENT FILING DATE: 2001-06-14
; PRIOR APPLICATION NUMBER: US 60/211,379
; PRIOR FILING DATE: 2000-06-14
; PRIOR APPLICATION NUMBER: US 60/237,054
; PRIOR FILING DATE: 2000-10-02
; NUMBER OF SEQ ID NOS: 3950
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3420
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Genbank Accession No. US2002142981A1 U73843
US-09-880-107-3420

Alignment Scores:
Pred. No.:   1.19e-189   Length: 1915
Score: 1707.00   Matches: 322
Percent Similarity: 92.72%   Conservative: 22
Best Local Similarity: 86.79%   Mismatches: 25
Query Match: 86.21%   Indels: 2

```
Db  1140  ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTGGCAAAAACTCAAGCGGC  1199
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy   360  TrpLysGluGluValGlyGluSerArgAsn  370
          :::||||||||
Db  1200  TGGAAGGAGGAAGAGAGTTCTCCAGAGTCGGAAC  1232

RESULT 5
US-09-967-768A-192
; Sequence 192, Application US/0996776A
; Patent No. US2002015087A1
; GENERAL INFORMATION:
; APPLICANT: Augustus, Meena
; TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
; TITLE OF INVENTION: Sets
; FILE REFERENCE: 689290-72
; CURRENT APPLICATION NUMBER: US/09/967,768A
; CURRNT FILING DATE: 2001-09-28
; PRIOR APPLICATION NUMBER: US/60/236,109
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,034
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,111
; PRIOR FILING DATE: 2000-09-28
; NUMBER OF SEQ ID NOS: 325
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 192
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-967-768A-192

Alignment Scores:
Pred. No.:              1.19e-189    Length:              1915
Score:                  1707.00      Matches:              322
Percent Similarity:     92.72%       Conservative:          22
Best Local Similarity:  86.79%       Mismatches:            25
Query Match:            86.21%       Indels:                 2
DB:                     10           Gaps:                   2

US-08-978-217-16_COPY_2_371 (1-370) x US-09-967-768A-192 (1-1915)

Qy    1  AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer  20
Db  123  GCTGCAACCTGTGAGATTAGCAACAATTTTAGCAACTACTTCAGTGCGATGTACAGCTCG  182

Qy   21  GluAspProThrLeuAlaProAlaPro---ThrThrPheGlyThrGluAspLeuVal  39
Db  183  GAGGACTCCACCCTGGCCTCTGTTCCCCTGCTGCCCACCTTTGGGACCGATGACTTGGTA  242

Qy   40  LeuThrLeuAsnAsnGlnGlnMetThrLeuGluGlyLysProGluLysAlaSerTrpThrSer  59
Db  243  CTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTGGGG  302

Qy   60  GluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpIleSerTyrGlnValGlu  79
Db  303  GAACAGCCCCAGTTCTGGTCGAAGACCCAGGTTCTGGAGTGGATCAGCTACCAAGTGGAG  362

Qy   80  LysAsnLysTyrAspAlaSerArgIleAspPheSerArgCysAsnMetAspGlyAlaThr  99
Db  363  AAGAACAAGTACGACGCAAGCCGCCATTGACTTCTCCACGATGTGACACTGGCGGCCACC  422

Qy  100  LeuCysSerCysAlaLeuGluLeuGluLeuValPheGlyLeuProLeuGlyIleLeu  119
Db  423  CTCTGCAATTGTGCCCTTGAGAGAGCTGCGTCTCGGTCTTTGGGCCCTCTGGGGGACCAACTC  482

Qy  120  HisAlaGlnLeuArgAspLeuThrSerAsnSerGluLeuSerTrpIleIleGlu  139
Db  483  CATGCCCAGCTGCGAGACCTCACTTCAGTCTTCTGATGAGCTCAGTTGGATCATTGAG  542

Qy  140  LeuLeuGluLysAspGlyMetSerPheGlnLeuSerLeuGlyLysAspProPheAsp  159
Db  543  CTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTA--GACCCCAGGGCCCTTTGAC  599
```

```
Qy  160  GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyr  179
Db  600  CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCTTACCAC  659

Qy  180  CysSerThrTyrGlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArg  199
Db  660  CCCGGCAGCTGTGGGCGCAGAGCCCCTCCCTGGCAGTCTCGACGTCTTCCACCGCAGGG  719

Qy  200  ThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAsp  219
Db  720  ACTGGTGCTTCTGGAGCTCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT  779

Qy  220  LeuThrGluSerLysValPheProArgAspArgAspTyrLysLysGlyGluPro  239
Db  780  CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTCGTGACTGCAAGAAGGGGGATCCC  839

Qy  240  LysHisGlyLeuArgGlyArgGlyProArgLysLeuSerLeuLysGluTyrTrpAspCys  259
Db  840  AAGCACGGGAGCCGGAAACGGGAAACGAGGCCCCAGAAAGCTGAGCAAAGATACTGGGACTGT  899

Qy  260  LeuGluLysLysLysSerHisAlaProArgGlyThrHisLeuTrpGluPheIleArg  279
Db  900  CTGGAGGCAAGAAGAGCAAGCACGCGCCAGAGCACCCACCTGTGGGAGTTCATCCGG  959

Qy  280  AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu  299
Db  960  GACATCCTCATCCACCCGGAGCTCAACGAGGGGCCTCATGAAGTGGAGAATCGGCATGAA  1019

Qy  300  GlyValPheLysPheLeuArgSerGluAlaValAlaAlaGlnLeuTrpGlyAlaLeuLys  319
Db 1020  GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCGCCCAACTATGGGCCCAAAAGAAAAG  1079

Qy  320  AsnSerAsnMetThrTyrGluLysSerArgAlaMetArgTyrTyrTyrLysArgGlu  339
Db 1080  AACAGCAACATGACCTACGAGAAGAGCTGAGCCGGCCATGAGGTACTACTACAAACGGGAG  1139

Qy  340  IleLeuGluArgValAspArgValArgLeuValTyrLysPheGlyLysAsnSerSerGly  359
Db 1140  ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTGGCAAAAACTCAAGCGGC  1199

Qy  360  TrpLysGluGluValGlyGluSerArgAsn  370
Db 1200  TGGAAGGAGGAAGAGAGTTCTCCAGAGTCGGAAC  1232

RESULT 6
US-09-922-217-1105
; Sequence 1105, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole Lynn
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C13
; CURRENT APPLICATION NUMBER: US/09/922,217
; CURRENT FILING DATE: 2001-08-03
; NUMBER OF SEQ ID NOS: 1124
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
; LENGTH: 1917
; TYPE: DNA
; ORGANISM: Homo sapiens
```

US-09-922-217-1105

```
Alignment Scores:
Pred. No.:
Score:                  1.19e-189
                        1707.00
Percent Similarity:     92.72%
Best Local Similarity:  86.79%
Query Match:            86.21%
DB:                     9
```

US-08-978-217-16_COPY_2_371 (1-370) x US-09-922-217-1105 (1-1917)

```
Qy    1 AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer 20
          ::: ||||||||||||||||||||||||||||||||||:::||||||||||||||||
Db  125 GCTGCAACCTGTGAGATTAGCAACATTTTAGCAACTACTTCAGTGCGATGTACAGCTCG 184

Qy   21 GluAspProThrLeuAlaProAlaProPro---ThrThrPheGlyThrGluAspLeuVal 39
Db  185 GAGGACTCCACCCTGGCCTCTGTCCCCTGCTGCCCCACCTTTGGGGCCAGCTGGTTGGGG 244

Qy   40 LeuThrLeuAsnAsnGlnMetThrLeuGluGlyTyrAlaSerThrThrSer 59
Db  245 CTGACCCTGAGCAACCCCAGAGTGTCATTGGAGGGGTACAGAGAAGGCCAGCCTGGTTGGGG 304

Qy   60 GluArgProGlnPheTrpSerLysThrGlnValLeuGluGluIleTrpIleSerTyrGlnValGlu 79
Db  305 GAACAGCCCCAGTTCTGTGGAAGAGCAGTTCTGACTGATCAGCTACCAAGTGGAG 364

Qy   80 LysAsnLysTyrAspAlaSerSerIleAspPheSerArgCysAsnMetAspGlyAlaThr 99
Db  365 AAGAACAAGTACGACGCCAAGCGCCATTGACTTCTCACGATGTGACATGGAGGGCCACC 424

Qy  100 LeuCysSerCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeu 119
Db  425 CTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCCCTGGGGGACCAACTC 484

Qy  120 HisAlaGlnLeuArgAspAspLeuThrSerAsnSerArgSerAspGluLeuSerTrpIleIleGlu 139
Db  485 CATGGCCCAGCTGCGCGAGACCCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAG 544

Qy  140 LeuLeuGluLysAspGlyMetSerProPheGlnGluSerLeuLeuGlyLysAspLeuGlyProPheAsp 159
Db  545 CTGCTGGAGAAGGATGGCATGTCCCTTCCAGGAGGCCCTA---GACCCAGGGCCCCTTTGAC 601

Qy  160 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyr 179
Db  602 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGTACAGCAAGCCAGCCCCTACCAC 661

Qy  180 CysSerThrTyrGlyTyrGlyValProSerProGlySerSerAspValSerThrAlaArg 199
Db  662 CCCGGGCAGCTGTGGCGCAGAGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 721

Qy  200 ThrAlaThrProGlnSerSerHisAlaSerArgAspSerGlyGlySerValAspLeuAsp 219
Db  722 ACTGGTGGTCCTTCCGGAGTCCCACTCCCACTCCCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 781

Qy  220 LeuThrGluLysLysValPheProArgAspAspPheThrArgTyrLysAspTyrLysGluPro 239
Db  782 CCCACTGATGGCAAGCTCTTCCCCAGCATGGTTTCGTGACTGCAAGAGAGGGGGATCCC 841

Qy  240 LysHisGlyLyLysArgGlyLysArgProArgLysGluLeuSerLysGluThrTrpAspCys 259
Db  842 AAGCACGGGAAGGAAGGGAAGCGGCCGCGGAAAGTGAGCAAAGAGTACTGGGACTGT 901

Qy  260 LeuGluGlyLyLysSerHisAlaProArgArgGlyThrHisLeuTrpProGluPheIleArg 279
Db  902 CTCGAGGGGAAGAAGAGCAGCACGCGGCCCAGAGGCACCCACCTGTGGCCAGGAGTTCATCCGG 961

Qy  280 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysLysTrpGluAsnArgHisGlu 299
Db  962 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1021

Qy  300 GlyValPheLysPheLeuArgSerGluLeuAlaValAlaGlnLeuTrpGlyGlnLeuLysLys 319
Db 1022 GGCGTCTTCAAGTTCCTGCGTCTCCGAGGCTGTGGCCCAACTATGGGCCCAAAGAAAAAG 1081

Qy  320 AsnSerAsnMetThrTyrGlyLeuSerLeuSerArgAlaMetArgTyrTyrLysArgGlu 339
Db 1082 AACAGCAACATGACCTACGAGAAGCTGAGCCGCGGCCATGAGCTACTACTACAAACGGGAG 1141

Qy  340 IleLeuGluArgValAspGlyArgArgLeuValThrTyrLysPheGlyLysAsnSerGly 359
Db 1142 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1201

Qy  360 TrpLysGluGluValGlyGluSerArgAsn 370
          :::||||||||||||||||||||||:::
Db 1202 TGGAAGGAGGAGGAGGTTCTCCAGAGTCGGAAC 1234
```

```
Alignment Scores:
Pred. No.:
Score:                  1.19e-189
                        1707.00
Percent Similarity:     92.72%
Best Local Similarity:  86.79%
Query Match:            86.21%
DB:                     14
```

US-08-978-217-16_COPY_2_371 (1-370) x US-10-025-380-1105 (1-1917)

```
Qy    1 AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer 20
          ::: ||||||||||||||||||||||||||||||||||:::||||||||||||||||
Db  125 GCTGCAACCTGTGAGATTAGCAACATTTTAGCAACTACTTCAGTGCGATGTACAGCTCG 184

Qy   21 GluAspProThrLeuAlaProAlaProPro---ThrThrPheGlyThrGluAspLeuVal 39
Db  185 GAGGACTCCACCCTGCCTCCCCGTTCCCCTGCTGCCCCACCTTTGGGCCATGAGCTTGGTA 244

Qy   40 LeuThrLeuAsnAsnGlnMetThrLeuGluGlyTyrAlaSerLeuGluThrSer 59
Db  245 CTGACCCTGAGCAACCCCAGAGTGTCATTGGAGGGGTACAGAGAAGGCCAGCCTGGTTGGGG 304

Qy   60 GluArgProGlnPheTrpSerLysThrGlnValLeuGluGluIleTrpIleSerTyrGlnValGlu 79
Db  305 GAACAGCCCCAGTTCTGTGGAAGAGCAGTTCTGACTGATCAGCTACCAAGTGGAG 364
```

```
Alignment Scores:
Pred. No.:
Score:                    1.23e-189         Length:          1956
                          1707.00           Matches:         322
Percent Similarity:       92.72%            Conservative:    22
Best Local Similarity:    86.79%            Mismatches:      25
Query Match:              86.21%            Indels:          2
DB:                       12                Gaps:            2

US-08-978-217-16_COPY_2_371 (1-370) x US-10-264-049-756 (1-1956)

Qy     1 AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer    20
Db   164 GCTGCAACCTGCGAGATTAGCAACATTTTAGCAACTACTTCAGTGCGATGTACAGCTCG   223

Qy    21 GluAspProThrLeuAlaProAlaPro---ThrThrPheGlyThrGluAspLeuVal      39
Db   224 GAGGACTTCCACCCTGGCCTCTGTTCCCCTGCTGACCTGGATGACCTGGTA          283

Qy    40 LeuThrLeuAsnAsnGlnMetThrLeuGluGlyProGluLysAlaSerTrpThrSer      59
Db   284 CTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTGGTGGGG 343

Qy    60 GluArgProGlnPheTrpSerLysThrGlnIleLeuGluTrpIleSerGlyTyrGlnValGlu  79
Db   344 GAACAGCCCCAGTTCTGGTCGAAGACCCAGATTCTCGAGACTCAGCTACCAAGTGGAG    403

Qy    80 LysAsnLysTyrAspAlaSerIleAspPheSerArgCysAsnMetAspGlyAlaThr      99
Db   404 AAGAACAAGTACGACGCCATTGACTTCTCACGATGTGACATGGATGGCGCCACC       463

Qy   100 LeuCysSerCysAlaLeuGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeu     119
Db   464 CTCTGCAATTGTGCCCTGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGACCAACTC     523

Qy   120 HisAlaGlnLeuArgAspLeuThrSerSerAsnSerAspGluLeuSerProIleIleGlu  139
Db   524 CATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCGATGAGCTCAGTTGGATCATTGAG   583

Qy   140 LeuLeuGluLysAspGlyMetSerPheGlnLeuSerLeuGlyAspLeuGlyProPheAsp  159
Db   584 CTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTA---GACCCAGGGCCCTTTGAC  640

Qy   160 GlnGlySerProPheAlaGlnLeuGluLeuAspAspArgGlnAlaSerProTyrTyr     179
Db   641 CAGGGCGCCCCCTTTGCCCAGGAGCTGTCGACGACGCTCCAAGCCACCCCTACCAC     700

Qy   180 CysSerThrTyrGlyProGlyProAlaProSerProSerAspSerSerAspValSerThrAlaArg 199
Db   701 CCCGGCAGCTGTGGGCGCCAGGAGCCCCCYGGCAGCTCTGACGTCTCCACCGCAGGG    760

Qy   200 ThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAsp  219
Db   761 ACTGGTGCTTCTGGAGCTCCACTCCTCAGACTCCGGTGGAAGTGACCTGGAT        820

Qy   220 LeuThrGluSerLysValPheProArgAspArgAspPheThrAspTyrLysLysGlyLysGluPro 239
Db   821 CCCACTGATGGCCAAGCTCTTCCCCAGCCATGGTTTCGTGACTGACCAAGAAGGGGGATCCC 880

Qy   240 LysHisGlyLysLysArgGlyArgProArgGlyLeuSerLysLysGluTyrTrpAspCys  259
Db   881 AAGCACGGGAAGAGAGGACGGAAACGAGGCCGGCCCCGAAAGAGTACTGGGACTGT     940
```

```
Db   305 GAACAGCCCCAGTTCTGGTCGAAGACGCAGATCAGCTGGATCAGTGGAG            364

Qy    80 LysAsnLysTyrAspAlaSerIleAspPheSerArgCysAsnMetAspGlyAlaThr      99
Db   365 AAGAACAAGTACGACGCCATTGACTTCTCACGATGTGACATGGATGGCGCCACC       424

Qy   100 LeuCysSerCysAlaLeuGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeu     119
Db   425 CTCTGCAATTGTGCCCTGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGACCAACTC     484

Qy   120 HisAlaGlnLeuArgAspLeuThrSerSerAsnSerAspGluLeuSerProIleIleGlu  139
Db   485 CATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCGATGAGCTCAGTTGGATCATTGAG   544

Qy   140 LeuLeuGluLysAspGlyMetSerPheGlnLeuSerLeuGlyAspLeuGlyProPheAsp  159
Db   545 CTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTA--GACCCAGGGCCCTTTGAC   601

Qy   160 GlnGlySerProPheAlaGlnLeuGluLeuAspAspArgGlnAlaSerProTyrTyr     179
Db   602 CAGGGCGCCCCCTTTGCCCAGGAGCTGTCGACGACGCTCCAAGCCACCCCTACCAC     661

Qy   180 CysSerThrTyrGlyProGlyProAlaProSerProSerAspSerSerAspValSerThrAlaArg 199
Db   662 CCCGGCAGCTGTGGGCGCCAGGAGCCCCCTCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 721

Qy   200 ThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAsp  219
Db   722 ACTGGTGCTTCTGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACCTGGAT       781

Qy   220 LeuThrGluSerLysValPheProArgAspArgAspPheThrAspTyrLysLysGlyLysGluPro 239
Db   782 CCCACTGATGGCCAAGCTCTTCCCCAGCCATGGTTTCGTGACTGACCAAGAAGGGGGATCCC 841

Qy   240 LysHisGlyLysLysArgGlyArgProArgGlyLeuSerLysLysGluTyrTrpAspCys  259
Db   842 AAGCACGGGAAGAAGAGGGGCCGGCCCCGAGGCAAAGAGTACTGGGACTGT         901

Qy   260 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg  279
Db   902 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG  961

Qy   280 AspIleIleHisProGlnLeuAsnGluGlyLeuMetGlyTrpGluAsnArgHisGlu     299
Db   962 GACATCCCATCACCCGAGCTCAACGAGGGCCTCATGAACTGGGAGAATCGGCATGAA   1021

Qy   300 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlnLeuLysLys     319
Db  1022 GGCGTCTTCAAGTTCCTGCGCTCCGAGGTGGTGGCCCAACTATGGGGCCAAAAGAAAAG 1081

Qy   320 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysLysArgGlu 339
Db  1082 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1141

Qy   340 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly  359
Db  1142 ATCCTGGAACGGGTGGATGGCCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC   1201

Qy   360 TrpGluGluGluValGlyGluArgAsn 370
Db  1202 TGGGAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1234
```

Qy 260 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 279
     |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 941 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCCACCACCTGTGGGAGTTCATCCGG 1000

Qy 280 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 299
     |||||||||||||||||||||||||||||||||||||||||:||||:|||||||:|||||
Db 1001 GACATCCTCATCCACCCCGAGCTYAACGAGGGCCTYATGAGGTGGGAGAATCGGCATGAA 1060

Qy 300 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 319
     ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1061 GGCGTCTTCAAGTTCCTGCGYTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAG 1120

Qy 320 AsnSerArgAsnMetThrTyrGluLysSerArgAlaMetArgTyrTyrTyrLysArgGlu 339
     ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1121 AACAGCAACATGACCTACGAGAAGTCAGCCCGGGCCATGAGGTACTACTACAAACGGGAG 1180

Qy 340 IleLeuGluArgValAspGlyArgLeuValTyrLysPheGlyLysAsnSerGly 359
     ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1181 ATCCTGGAACGGGTGGATGGGCGGCTGGTGTACAAGTTTGGCAAAAACTCAAGCGGC 1240

Qy 360 TrpLysGluGluLeuValGlyGluSerArgAsn 370
     |||:||| :||||||||||||
Db 1241 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1273

RESULT 9
US-09-925-301-207
; Sequence 207, Application US/09925301
; Patent No. US2002052308A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
; FILE-REFERENCE: PA106
; CURRENT APPLICATION NUMBER: US/09/925,301
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: PCT/US00/05882
; PRIOR FILING DATE: 2000-03-08
; PRIOR APPLICATION NUMBER: 60/124,270
; PRIOR FILING DATE: 1999-03-12
; NUMBER OF SEQ ID NOS: 1694
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 207
; LENGTH: 1996
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-925-301-207

Alignment Scores:
Pred. No.: 1.26e-189 Length: 1996
Score: 1707.00 Matches: 322
Percent Similarity: 92.72% Conservative: 22
Best Local Similarity: 86.79% Mismatches: 25
Query Match: 86.21% Indels: 2
DB: Gaps: 2

US-08-978-217-16_COPY_2_371 (1-370) x US-09-925-301-207 (1-1996)

Qy 1 AlaAlaThrCysGluIleSerAsnValPheSerAsnAlaMetTyrSer 20
    |||||||||||||||||:|||||:|||||||||||||||||||||||||
Db 144 GCTGCAACCTGTGAGATTAGCAACATTTTAGCAACTACTTCAGTGCGATGTACAGCTCG 203

Qy 21 GluAspProThrLeuAlaProAlaPro---ThrThrProGlyThrGluAspLeuVal 39
    |||||||||||||||||||||||| :|||:|||||||||||||||||
Db 204 GAGGACTTCACCCTGGCCTTGTCCCCGTGCCCACCTTTGGGGCGACTGGTA 263

Qy 40 LeuThrLeuAsnAsnGlnGlnMetThrLeuGluGlyProGluLysAlaSerTrpThrSer 59
    |||||||||:||| ||||:||:||||||||||||||||||||||||||||||
Db 264 CTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCAGCTGGTTGGGG 323

Qy 60 GluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpIleSerTyrGlnValGlu 79
    |||||||||||||||:|||:||||||||||||||||||||||||||||||||||||||||
Db 324 GAACAGCCCCAGTTCTGGTCAAAGACCCAAGTTCTGGAGTGGATCAGCTACCAAGTGGAG 383

Qy 80 LysAsnLysTyrAspAlaSerIleAspPheSerArgCysAsnMetAspGlyAlaThr 99

Db 384 AAGAACAAGTACGACGCAAGCGGCCATTGACTTCAGCAGGTGCAATGGATGGCGCCACC 443
    |||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Qy   LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 279

Qy 100 LeuCysSerCysAlaLeuGluGluLeuArgValPheGlyProLeuGlyAspGlnLeu 119
    |||:||||:||||||||||||||||||||||||||||||||||||||||||
Db 444 CTCTGCAATTGTGCCCTTGAGGAGTTGCGTGTTCTGGGCCTCTGGGGACCAACTC 503

Qy 120 HisAlaGlnLeuArgAspLeuThrSerAsnSerAspGluSerTrpIleIleGlu 139
    |||||||||||||||||||||||||||||||||||||||||||||||||||
Db 504 CATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTGATGAGTCAGTTGGATCATTGAG 563

Qy 140 LeuLeuGlyLysAspGlyMetSerPheGlnGluSerLeuGlyAspLeuGlyProPheAsp 159
    ||||||||||||||||||||||||||||||||::: ||||||||||||||||
Db 564 CTGCTGGGCAAGGATGGCATGAGCTTCCAGGAGTCCCTA--GACCCAGGGCCCTTTGAC 620

Qy 160 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyr 179
    |||||||||||||||||||||||||||||||||||||:|||:||:::||||||||
Db 621 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 680

Qy 180 CysSerThrTyrGlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArg 199
    |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 681 CCCGGCAGCTGTGGCGCAGGAGCCCCTCCCYGGCAGCTCTGACGTCTCCACCGCACGGG 740

Qy 200 ThrAlaThrProGlnSerSerHisAlaSerArgGlySerGlyAspValAspLeuAsp 219
    ||| :::|||||||||||||||||||||||||||||||||||||||||||
Db 741 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 800

Qy 220 LeuThrGluSerLysValPheProArgAspAspPheThrAspTyrLysGlyGluPro 239
    |||||||||||:||:||||||||||||||||||||||||||||||||||:||||||
Db 801 CCCACTGATGGCAAGTCTTCCCCAGCGATGGTTTCGTGACTGCAAGAGAAGGGGGATCCC 860

Qy 240 LysHisGlyLysLysArgLysLysArgProArgProArgLysLeuSerLysSerGluCys 259
    |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 861 AAGCACGGGAAGAAAACGGAAGAAGCTGAGCAAAGAGTACTGGGACTGT 920

Qy 260 LeuGluGluGlyLysLysSerHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 279
    ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 921 CTCGAGGGCAAGAAGAGCACGCGCCCCAGAGGCCACCACCTGTGGGAGTTCATCCGG 980

Qy 280 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 299
    ||||||||||||||||||||||||||||||||||||||||||:||||:|||||||:||||
Db 981 GACATCCTCATCCACCCCGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1040

Qy 300 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLys 319
    |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1041 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAG 1100

Qy 320 AsnSerAsnMetThrTyrGluLysLeuArgAlaMetArgTyrTyrTyrLysArgGlu 339
    ||||||||||||||||||||:|||||||||||||||||||||||||||||||||||||
Db 1101 AACAGCAACATGACCTACGAGAAGCCCATCAGGGCCATGAGGTACTACTACAAACGGGAG 1160

Qy 340 IleLeuGluArgValAspGlyArgLeuValArgLeuLysAsnSerGlySer 359
    ||||||||||||||||||||||||||||||||||||||||||:||||||
Db 1161 ATCCTGGAACGGGTGGATGGGCGGCTGGTTCTACAAGTTTGGCAAAAACTCAAGCGGC 1220

Qy 360 TrpLysGluGluLeuValGlyGluSerArgAsn 370
    |||:|||| :||||||||||||
Db 1221 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1253

RESULT 10
US-10-131-410-64
; Sequence 64, Application US/10131410
; Publication No. US20030235915A1
; GENERAL INFORMATION:
; APPLICANT: SPECHT, THOMAS
; APPLICANT: HINZMANN, BERND
; APPLICANT: SCHMITT, ARMIN
; APPLICANT: PILARSKY, CHRISTIAN
; APPLICANT: DAHL, EDGAR
; APPLICANT: ROSENTHAL, ANDRE
; TITLE OF INVENTION: HUMAN NUCLEIC ACID SEQUENCES FROM TISSUE OF BREAST
; TITLE OF INVENTION: TUMORS
; FILE REFERENCE: SCH-1763

```
; CURRENT APPLICATION NUMBER: US/10/131,410
; CURRENT FILING DATE: 2002-04-25
; PRIOR APPLICATION NUMBER: 09/646,673
; PRIOR FILING DATE: 2000-09-20
; PRIOR APPLICATION NUMBER: PCT/DE99/00908
; PRIOR FILING DATE: 1999-03-19
; NUMBER OF SEQ ID NOS: 202
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 64
; LENGTH: 2269
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-131-410-64

Alignment Scores:
Pred. No.:                          2269
Score:                     2.05e-160
                           1458.50
Percent Similarity:           93.71%
Best Local Similarity:        88.36%
Query Match:                  73.66%
DB:                              12

US-08-978-217-16_COPY_2_371 (1-370) x US-10-131-410-64 (1-2269)

Qy    53  GluLysAlaSerTrpThrSerGluArgProGlnPheTrpSerLysThrGlnValLeuGlu  72
              ||||||||||||||||||||||||||||||||| :||:|  ||||  ||||:||||||
Db    15  GAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGAG-CAGGTTCTCGGAC  73

Qy    73  TrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerIleAspPheSerArg  92
              ||||||||||||||||||||:||||:||||:| ||::|| :||||| ||||||
Db    74  TGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCCCATTGACTTCTCACGA  133

Qy    93  CysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluGluLeuArgLeuValPhe  112
              ||::||||| :||::|||||:|| ||||||||||||:||:|||||||||||||:||
Db   134  TGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTT  193

Qy   113  GlyProLeuGlyAspGlnLeuHisAlaGlnLeuAsnLeuArgAspAspLeuThrSerSerAsp  132
              ||||:|||||:|||:||||||| :|||||||||||||:||||||| ||||||||||||
Db   194  GGGCCTCTGGGGCGCCACCAACTCCATGCCAGCTGCAGAGACCCTCAGCTCTTCTGAT  253

Qy   133  GluLeuSerTrpIleIleGluLeuGluLysAspGlyMetSerPheGlnGluSerLeu  152
              ||||||||||||:|||||||||||||||||||| ||:|| |:|||:||
Db   254  GAGCTCAGTTGGATCATTGAGCTGCTGAAGGATGGCATGGCCTTCCAGGAGCCCTA  313

Qy   153  GlyAspLeuGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAspGly  172
              |||||||||||||||||||  ||||||||||||||:||||||||||||||
Db   314  --GACCCAGGGCCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGT  370

Qy   173  ArgGlnAlaSerProTyrTyrCysSerThrArgGlyProGlyAlaProSerProGlySer  192
              :||:|||||| |  ::||:::||||  ||||:|::||:|| ::|||||
Db   371  CAGCAGGCCAGCCCCTACCACCCCGGGACCCGGGCAGTGTGCGGAGAGCCCCCCTGGCAGC  430

Qy   193  SerAspValSerThrAlaArgThrAlaThrProGlnSerSerHisAlaSerAspSerGly  212
              |||||| :::| || |:  :::|||||:| :||  ||
Db   431  TCTGACGTCTCCACCGC-AGGACTGGTGCTTCTCCACTCCTCAGACTCCGGT  489

Qy   213  GlySerAspValAspLeuAspLeuSerLeuThrGluLeuAspValPheProArgAspAspPheThr  232
              |:|||||:|:|| |||||||||||| |:||||||:|||  ||||||| ||||
Db   490  GGAAGTGACGTGGACCTGGACCTCTCCCTGACTGGGTTTTCGT  549

Qy   233  AspTyrLysLysGlyHisProLysHisGlyArgLysGlyArgProAlaGlyLysLeu  252
              |||||:||||| |||:||:||||||||:|| |||||||||||||||
Db   550  GACTGCAAGAAGGGGGATCCCAAGCACGGGAGGAAACGCGGAGAAGCTG  609

Qy   253  SerLysGluTyrTrpAspCysLeuGluGlyLysLysSerLysSerHisAlaProArgGlyTyrThr  272
              ||||:|:||:|||||||||:||||||||||:|||::|
Db   610  AGCAAAGAGTACTGGGACTGTCTCGAGGGCAAGAAGAGCAAGAGCCACGCACC  669

Qy   273  HisLeuTrpGluPheGluArgAspIleLeuIleHisProLeuLeuAsnGluGlyLeuMet  292
              ::|||||||:|||||| |: ||| :||||  ||||||||||||
Db   670  CACCTGTGGGAGTTCATCCGGGACATCTCAACCCGAGCTCAACGAGGGCCTCATG  729

Qy   293  LysTrpAspGluAsnArgHisGluGlyValPheLysHisPheLysSerGluGlnGlnAlaAlaValAlaGln  312
```

```
Db   730  AAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCTTCAAGTCTGAGCCTGGGCCCAA  789
             ||||||||||||||||||||||||||||||||||||||||||||||| ||||||||||||
Qy   313  LeuTrpIleGlnLysLysAsnSerAsnMetThrTyrGluLysLeuSerArgAlaMet  332
             |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   790  CTATGGGGCCAAAAGAAAAAGAACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATG  849

Qy   333  ArgGlyTyrTyrProTyrArgGluIleLeuArgGlyValAspGlyArgLeuValTyrLys  352
             |||||||||||||||||||||||||||||||||| ||||||||||||||||||||||
Db   850  AGGTACTACTACAAACGGGAGATCCTGAGACGGGTGGATGGCCGGCTCGTCTACAAG  909

Qy   353  PheGlyLysAsnSerGlyTrpLysGlyGluGluValGlyGluValGlySerArgAsn  370
             :||||||||||||||||||:||||||||||||||||||||||||||||||||
Db   910  TTTGGCAAAAACTCAAGCGGCTGGAAGGAAGAGGTTCCAGAGTCGGAAC  963
```

```
RESULT 11
US-09-922-217-853/c
; Sequence 853, Application US/0922217
; Patent No. US2020076414A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole Lynn
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C13
; CURRENT APPLICATION NUMBER: US/09/922,217
; CURRENT FILING DATE: 2001-08-03
; NUMBER OF SEQ ID NOS: 1124
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 853
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-922-217-853

Alignment Scores:
Pred. No.:                                 Length:              626
Score:            4.34e-99                  Matches:             174
                  928.50                    Conservative:         16
Percent Similarity:   90.91%               Mismatches:           18
Best Local Similarity: 83.25%              Indels:                1
Query Match:          46.89%               Gaps:                  1
DB:                       9

US-08-978-217-16_COPY_2_371 (1-370) x US-09-922-217-853 (1-626)

Qy    51  GlyProGluLysAlaSerTrpThrSerGluArgProGlnPheTrpSerLysThrGlnVal  70
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   624  GGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACCAGAGTT  565

Qy    71  LeuGluTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerIleAspPhe  90
              |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   564  CTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCCAGCCATTGACTTC  505

Qy    91  SerArgCysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluGluLeuArgLeu  110
              ||||||| ||:||||||||||||||||||||||||::|||||||||||||||
Db   504  TCACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTG  445

Qy   111  ValPheGlyProLeuGlyArgGlnLeuHisAlaGlnLeuAsnLeuArgThrSerAsnSer  130
              ||||||||||||||||:::|||||||||||||||||||||||||::: |::|
Db   444  GTCTTTGGGCCTCTGGGGCGCCACCAACTCCATGCCAGCTGCAGAGACCCTCACTTCAGCTCT  385

Qy   131  SerAspGluLeuSerTrpIleIleGluLeuGluLeuLysAspGlyMetSerPheGlnGlu  150
              ||||||||||||||||||||||||||||||| :||::|||||||:||
Db     ...
```

```
Qy  131 SerAspGlnLeuSerTrpIleIleGluLeuLeuLysAspGlyMetSerPheGlnGlu 150
Db  384 TCTGATGAGCTCAGTTGGATCATTGAGCTGCTCGGAGAAGGATGGCATGGCCTTCCAGGAG 325
        |||||||||||||||||||||||||||||||||||||||||||||||

Qy  151 SerLeuGlyAspLeuGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAsp 170
Db  324 GCCCTA---GACCCAGGGCCCTTGACCAGGGCAGCTGTGGAC 268

Qy  171 AspGlyArgGlnAlaSerProTyrTyrCysSerThrTyrGlyProGlyAlaProSerPro 190
Db  267 GACGGTCAGCAAGCAGCCCTACCACCCCGGCAGTGTGGCGGAGGAGCCCCTCCCCC 208

Qy  191 GlySerSerAspValSerThrAlaArgThrAlaThrProGlnSerSerHisAlaSerAsp 210
Db  207 GGCAGCTCTGAGCTCTCCACCGGACCTGGTGCTTCTCCGGAGCTCCCACTCCTCAGAC 148

Qy  211 SerGlyGlySerAspValAspLeuThrGluSerLysValPheProArgAspAsp 230
Db  147 TCCGGTGGAAGTGACGTGGACCTGGATCCCGATGGCAAGGTCTTCCCAGGCGATGGT 88

Qy  231 PheThrAspTyrLysGlyGluProLysHisGlyLysArgLysArgGlyArgProArg 250
Db  87  TTTCGTGACTGCAAGAGGGGGGATCCCAAGCACGGAAGCCGGAAACCAGGCCGGCCCCGA 28

Qy  251 LysLeuSerLysGluTyrTrpAspCys 259
Db  27  AAGCTGAGCAAAGAGTACTGGGACTGT 1
```

RESULT 13
US-10-025-380-853/c
; Sequence 853, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole L.
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Skeiky, Yasir A. W.
; APPLICANT: Fanger, Gary R.
; APPLICANT: Vedvick Thomas S.
; APPLICANT: Carter, Darrick
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C14
; CURRENT APPLICATION NUMBER: US/10/025,380
; CURRENT FILING DATE: 2001-12-19
; NUMBER OF SEQ ID NOS: 1129
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 853
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-025-380-853

Alignment Scores:
Pred. No.:   626
Score: 4.34e-99   Matches: 174
Percent Similarity: 90.91%   Conservative: 16
Best Local Similarity: 83.25%   Mismatches: 18
Query Match: 46.89%   Indels: 1
DB: Gaps: 1

US-08-978-217-16_COPY_2_371 (1-370) x US-10-025-380-853 (1-626)

```
Db  384 TCTGATGAGCTCAGTTGGATCATTGAGCTGCTCGGAGAAGGATGGCATGGCCTTCCAGGAG 325
        |||||||||||||||||||||||||||||||||||||||||||||||

Qy  151 SerLeuGlyAspLeuGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAsp 170
Db  324 GCCCTA---GACCCAGGGCCCTTGACCAGGGCAGCTGTGGAC 268

Qy  171 AspGlyArgGlnAlaSerProTyrTyrCysSerThrTyrGlyProGlyAlaProSerPro 190
Db  267 GACGGTCAGCAAGCAGCCCTACCACCCCGGCAGTGTGGCGGAGGAGCCCCTCCCCC 208

Qy  191 GlySerSerAspValSerThrAlaArgThrAlaThrProGlnSerSerHisAlaSerAsp 210
Db  207 GGCAGCTCTGAGCTCTCCACCGGACCTGGTGCTTCTCCGGAGCTCCCACTCCTCAGAC 148

Qy  211 SerGlyGlySerAspValAspLeuThrGluSerLysValPheProArgAspAsp 230
Db  147 TCCGGTGGAAGTGACGTGGACCTGGATCCCGATGGCAAGGTCTTCCCAGGCGATGGT 88

Qy  231 PheThrAspTyrLysGlyGluProLysHisGlyLysArgLysArgGlyArgProArg 250
Db  87  TTTCGTGACTGCAAGAGGGGGGATCCCAAGCACGGAAGCCGGAAACCAGGCCGGCCCCGA 28

Qy  251 LysLeuSerLysGluTyrTrpAspCys 259
Db  27  AAGCTGAGCAAAGAGTACTGGGACTGT 1
```

RSULT 12
US-09-833-263-853/c
; Sequence 853, Application US/09833263
; Patent No. US2002010547A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Stolk, John A.
; APPLICANT: Meagher, Madeleine J.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C12
; CURRENT APPLICATION NUMBER: US/09/833,263
; CURRENT FILING DATE: 2001-04-10
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 853
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Homo sapien
US-09-833-263-853

Alignment Scores:
Pred. No.:   626
Score: 4.34e-99   Matches: 174
Percent Similarity: 90.91%   Conservative: 16
Best Local Similarity: 83.25%   Mismatches: 18
Query Match: 46.89%   Indels: 1
DB: Gaps: 1

US-08-978-217-16_COPY_2_371 (1-370) x US-09-833-263-853 (1-626)

```
Qy  51  GlyProGluLysAlaSerTrpThrSerGluArgProGlnPheSerLysThrGlnVal 70
Db  624 GGTACAGAGAAGGCCAGCTGGTTGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTT 565

Qy  71  LeuGluTrpIleSerTyrGlnValGlyLysAsnLysTyrAspAlaSerIleAspPhe 90
Db  564 CTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTC 505

Qy  91  SerArgCysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluGluLeuArgLeu 110
Db  504 TCACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTG 445

Qy  111 ValPheGlyProLeuGluGlnLeuHisAlaGlnLeuArgAspLeuThrSerAsnSer 130
Db  444 GTCTTTGGGCCCTCTGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCT 385
```

Alignment Scores:
Pred. No.:   Length: 563
Score: 833.50   Matches: 157
Percent Similarity: 91.49%   Conservative: 15
Best Local Similarity: 83.51%   Mismatches: 15
Query Match: 42.10%   Indels: 1
DB: Gaps: 1
                        5.1e-88

US-08-978-217-16_COPY_2_371 (1-370) x US-09-922-217-944 (1-563)

```
Qy  72 GluTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerSerIleAspPheSer  91
          :::||||||||||||||||||||||| :::|:||
Db 562 GACTGGATCAGCTACCAAGTGGAGAGAACAAGTACGACGGCCATTGACTTCTCA 503

Qy  92 ArgCysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluGluLeuArgLeuVal 111
Db 502 CGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTC 443

Qy 112 PheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerAsnSerSer 131
Db 442 TTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCT 383

Qy 132 AspGluLeuSerTrpIleIleGluLeuGluLysAspGlyMetSerProPheGlnGluSer 151
Db 382 GATGAGCTCAGTTGGATCATTGAGCTGGAGAAGGATGGCATGGCCTCCAGGAGCC 323

Qy 152 LeuGlyAspLeuGlyProPheAspGlnGlySerProPheAlaGlnLeuLeuLeuAspAsp 171
Db 322 CTA---GACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGCTGCTGTGGACGAC 266

Qy 172 GlyArgGlnAlaSerProTyrTyrCysSerThrTyrGlyProGlyAlaProSerProGly 191
Db 265 GGTCAGCAAGCCAGCCCCTACCACCCGGCAGCTGTGGCAGGAGCCCCTCCCCCGGC 206

Qy 192 SerSerAspValSerThrAlaArgThrAlaArgProGlnSerSerHisAlaSerAspSer 211
Db 205 AGCTCTGACGTCTTCCACCGCAGGACTGGTTGCTCTTCCGGAGCTCCACTCCTCAGACTCC 146

Qy 212 GlyGlySerAspValAspLeuAspLeuThrGluSerLysValPheProArgAspPhe 231
Db 145 GGTGGAAGTGACCTGGACCTGACCGAGAGTAAGGTGTTCCCCAGCAGATGGTTTT 86

Qy 232 ThrAspTyrLysLysGlyGluProLysHisGlyLysLeuArgLysArgGlyArgProArgLys 251
Db  85 CGTTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCTGAGGAAGCGGGGCCCCGGCAAAG 26

Qy 252 LeuSerLysGluTyrTrpAspCys 259
Db  25 CTGGACAAGAGTACTGGGACTGT 2
```

```
Qy  51 GlyProGluLysAlaSerTrpThrSerGluArgProGlnPheSerLysThrGlnVal 70
Db 624 GGTCACAGAGAAGGCCAGCTGGTGGGGACAGACCCCCAGTTCTCGTCGAAGACCCAGGTT 565

Qy  71 LeuGluTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerIleAspPhe 90
Db 564 CTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGGCGCCATTGACTTC 505

Qy  91 SerArgCysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluLeuGluArgLeu 110
Db 504 TCACGATGTGACATGGATGGCGCCACCCTGTGCCCTTGCCCTCTG 445

Qy 111 ValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerAsnSer 130
Db 444 GTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCT 385

Qy 131 SerAspGluLeuSerTrpIleIleGluLeuGluLysAspGlyMetSerPheGlnGlu 150
Db 384 TCTGATGAGCTCAGTTGGATCATTGAGCTGGAGAAGGATGGCATGGCCTTCCAGGAG 325

Qy 151 SerLeuGlyAspLeuGlyProPheAspGlnGlySerProPheAlaGlnLeuLeuLeuAsp 170
Db 324 GCCCTA---GACCCAGGGCCAGCCCTTTGCCCAGCTGCTGTGCTGAC 268

Qy 171 AspGlyArgGlnAlaSerProTyrTyrCysSerThrTyrGlyProGlyAlaProSerPro 190
Db 267 GACGGTCAGCAAGCCAGCCCCTACCACCCGGCAGTGTGGCGGAGACCCCCCCCC 208

Qy 191 GlySerSerAspValSerThrAlaArgThrAlaArgProGlnSerSerHisAlaSerAsp 210
Db 207 GGCAGCTCTGACGTCTCCACCGCAGGACTGGTGCTTCTCGGAGCTCCACTCCTCAGAC 148

Qy 211 SerGlyGlySerAspValAspLeuAspLeuThrGluSerLysValPheProArgAspAsp 230
Db 147 TCCGGTGGAAGTGACGTGGACCTGGACCTGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGT 88

Qy 231 PheThrAspTyrLysLysGlyGluProLysHisGlyLysLeuArgLysArgGlyProArg 250
Db  87 TTTCGTGACTGCGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGCGGGCCCCGA 28

Qy 251 LysLeuSerLysGluTyrTrpAspCys 259
Db  27 AAGCTGAGCAAAGAGTACTGGGACTGT 1
```

us-08-978-217-16_copy_2_371.rnpb

```
Alignment Scores:
Pred. No.:                5.1e-88          Length:         563
Score:                    833.50           Matches:        157
Percent Similarity:       91.49%           Conservative:   15
Best Local Similarity:    83.51%           Mismatches:     15
Query Match:              42.10%           Indels:         1
DB:                       10               Gaps:           1

US-08-978-217-16_COPY_2_371 (1-370) x US-09-833-263-944 (1-563)

Qy    72 GluTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerIleAspPheSer  91
         :::|||||||||||||||||||||||||||||||||||||||||||||:::|||||||
Db   562 GACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCA 503

Qy    92 ArgCysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluGluArgLeuVal  111
         ||||||||||||::|||||||||||||||||:::|||||||||||||||||||||||||
Db   502 CGATGTGACATGGATGGCGCACCCTTGCCAATTGTGCCCTTGAGGAGCTGCGTCTGGTC 443

Qy   112 PheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerAsnSerSer 131
         |||||||||||||||||||||||||||||||||||||||::|||::|||||
Db   442 TTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCT 383

Qy   132 AspGluLeuSerTrpIleIleGluGluLysGluLysAspGlyMetSerPheGlnGluSer 151
         |||||||||||||||||||||||||||||||||||||||||||:::|||||
Db   382 GATGAGCTCAGTTGGATCATTGAGGAGAAGGAGAAGGATGGCCTTCCAGGAGGCC 323

Qy   152 LeuGlyAspLeuGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAsp 171
         |||    ||||||||||||||||||||||||||||||||||||||||||
Db   322 CTA---GACCCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGAC 266

Qy   172 GlyArgGlnAlaSerProTyrTyrCysSerThrTyrGlyProGlyAlaProSerProGly 191
         ||||||||||||||::::     :::  |||||||||||||||||||||||||
Db   265 GGTCAGCAAGCCAGCCCTACCACCCCGGCAGCTGTGGCGGCAGGAGCCCCTCCCCCCGGC 206

Qy   192 SerSerAspValSerThrAlaArgThrAlaThrProGlnSerSerHisAlaSerAspSer 211
         ||||           :::|||||||||||||||||||||||||||:::||||
Db   205 AGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCC 146

Qy   212 GlyGlySerAspValAspLeuThrGluSerLysValPheProArgAspAspPhe  231
         |||         :::|||::  |||||||||||||||||||||||||||
Db   145 GGTGGAAGTGACGTGGACCTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTT  86

Qy   232 ThrAspTyrLysLysGluTyrGlyHisGlyLysValLysArgGlyLysArgProArgLys 251
         |||:::|||||||||||||||||||||||||||||||||||||||||||
Db    85 CGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAGCAGAGGCCCGGCCCCGAAAG  26

Qy   252 LeuSerLysGluTyrTrpAspCys 259
         |||||||||||:::|||||||
Db    25 CTGAGCAAAGAGTACTGGGACTGT  2
```

Search completed: February 13, 2004, 01:46:24
Job time : 599.817 secs

```
OM nucleic - nucleic search, using sw model

          Copyright  GenCore version 5.1.6
                     (c) 1993 - 2004 Compugen Ltd.

Run on:    February 13, 2004, 01:27:22  ; Search time 2732.91 Seconds
                                          (without alignments)
                                         10448.744 Million cell updates/sec

Title:             US-08-978-217-15
Perfect score:     7752
Sequence:          1 GGATCCTTCCAAGGCACTGA..........CAGAGGGGTCTCCTCGATCC 7752

Scoring table:     IDENTITY_NUC
                   Gapop 10.0, Gapext 1.0

Searched:          2449703 seqs, 1841816367 residues

Total number of hits satisfying chosen parameters:     4899406

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing:  Minimum Match 0%
                  Maximum Match 100%
                  Listing first 45 summaries

Database :       Published_Applications_NA:*
         1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
         2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
         3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
         4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
         5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
         6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
         7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
         8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
         9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
        10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
        11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
        12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
        13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq2:*
        14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
        15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
        16: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
        17: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
        18: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*
```

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB	ID	Description
1	216	2.8	1907	15	US-10-097-340-74	Sequence 74, Appl
2	215.6	2.8	1915	10	US-09-964-824A-101	Sequence 101, App
3	215.6	2.8	1915	10	US-09-964-824A-563	Sequence 563, App
4	215.6	2.8	1915	10	US-09-880-107-3420	Sequence 3420, Ap
5	215.6	2.8	1915	10	US-09-967-768A-192	Sequence 192, App
6	215.6	2.8	1917	9	US-09-922-217-1105	Sequence 1105, Ap
7	215.6	2.8	1917	14	US-10-025-380-1105	Sequence 1105, Ap
8	215.6	2.8	1956	12	US-10-264-049-756	Sequence 756, App
9	215.6	2.8	1996	9	US-09-925-301-207	Sequence 207, App
10	215.6	2.8	2269	12	US-10-131-410-64	Sequence 64, Appl
11	185.8	2.4	1435	12	US-10-292-798-1601	Sequence 1601, Ap
12	185.8	2.4	1435	13	US-10-017-161-1953	Sequence 1953, Ap
13	176.2	2.3	626	9	US-09-922-217-853	Sequence 853, App
14	176.2	2.3	626	10	US-09-833-263-853	Sequence 853, App
15	176.2	2.3	626	14	US-10-025-380-853	Sequence 853, App
16	174.2	2.2	620	15	US-10-060-036-2379	Sequence 2379, Ap
17	166	2.1	437	10	US-09-998-598-2216	Sequence 2216, Ap
18	163.8	2.1	275	15	US-10-060-036-3261	Sequence 3261, Ap
19	163.8	2.1	499	10	US-09-998-598-2290	Sequence 2290, Ap
20	163.8	2.1	502	9	US-09-604-287A-282	Sequence 282, App
21	163.8	2.1	502	10	US-09-339-338-282	Sequence 282, App
22	163.8	2.1	502	11	US-09-551-621-282	Sequence 282, App
23	163.8	2.1	502	13	US-10-124-805-282	Sequence 282, App
24	163.8	2.1	502	14	US-10-007-805-282	Sequence 282, App
25	163.8	2.1	502	15	US-10-076-622-282	Sequence 282, App
26	148	1.9	451	10	US-09-998-598-32	Sequence 32, Appl
27	144	1.9	528	15	US-10-066-543-3233	Sequence 3233, Ap
28	140.2	1.8	355	10	US-09-867-701-4818	Sequence 4818, Ap
29	132.2	1.7	563	9	US-09-922-217-944	Sequence 944, App
30	132.2	1.7	563	10	US-10-025-380-944	Sequence 944, App
31	132.2	1.7	563	14	US-10-085-117-235	Sequence 235, App
32	125.8	1.6	33488	12	US-10-305-720-927	Sequence 927, App
33	125.6	1.6	237	12	US-09-893-238-4	Sequence 4, Appli
34	123.6	1.6	5973	10	US-10-085-117-253	Sequence 253, App
35	122	1.6	45606	12	US-10-029-386-26439	Sequence 26439, A
36	121.4	1.6	214	13	US-09-864-761-14745	Sequence 14745, A
37	121.4	1.6	593	9	US-10-029-386-12739	Sequence 12739, A
38	121.4	1.6	593	13	US-10-085-117-85	Sequence 85, Appl
39	120.8	1.6	35403	12	US-10-004-113-43	Sequence 43, Appl
40	119.8	1.5	42533	12	US-09-972-546-16	Sequence 16, Appl
41	119.6	1.5	215980	11	US-10-175-523-71	Sequence 71, Appl
42	119.2	1.5	123192	15	US-10-085-117-223	Sequence 223, App
43	118.2	1.5	177249	12	US-10-085-117-241	Sequence 241, App
44	117.8	1.5	165961	12	US-10-229-834A-6	Sequence 6, Appli
45	117.8	1.5	263744	13		

ALIGNMENTS

RESULT 1
US-10-097-340-74
; Sequence 74, Application US/10097340
; Publication No.US2003008725OA1
GENERAL INFORMATION:
  APPLICANT: John MONAHAN
  APPLICANT: Manjula GANNAVARAPU
  APPLICANT: Sebastian HOERSCH
  APPLICANT: Shubhangi KAMATKAR
  APPLICANT: Steve G. KOVATS
  APPLICANT: Rachel E. MEYERS
  APPLICANT: Michael MORRISEY
  APPLICANT: Peter OLANDT
  APPLICANT: Ami SEN
  APPLICANT: Peter VEIBY
  APPLICANT: Gordon B. MILLS
  APPLICANT: Robert C. BAST, Jr.
  APPLICANT: Karen LU
  APPLICANT: Rosemarie SCHMANDT
  APPLICANT: Xumei ZHAO
  APPLICANT: Karen GLATT
  TITLE OF INVENTION: Nucleic Acid Molecules and Proteins For The Identification,
  TITLE OF INVENTION: Assessment, Prevention, and Therapy of Ovarian Cancer
  FILE REFERENCE: MRI-030
  CURRENT APPLICATION NUMBER: US/10/097,340
  CURRENT FILING DATE: 2002-03-14
  PRIOR APPLICATION NUMBER: 60/276,025
  PRIOR FILING DATE: 2001-03-14
  PRIOR APPLICATION NUMBER: 60/325,149
  PRIOR FILING DATE: 2001-09-26
  PRIOR APPLICATION NUMBER: 60/276,026
  PRIOR FILING DATE: 2001-03-14
  PRIOR APPLICATION NUMBER: 60/324,967
  PRIOR FILING DATE: 2001/09/26
  PRIOR APPLICATION NUMBER: 60/311,732
  PRIOR FILING DATE: 2001-08-10
  PRIOR APPLICATION NUMBER: 60/325,102
  PRIOR FILING DATE: 2001-09-26

```
; CURRENT FILING DATE: 2001-09-27
; PRIOR APPLICATION NUMBER: US/60/236,033
; PRIOR FILING DATE: 2001-09-28
; PRIOR APPLICATION NUMBER: US/60/235,032
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,028
; PRIOR FILING DATE: 2000-09-28
; NUMBER OF SEQ ID NOS: 583
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 101
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-964-824A-101

Query Match         2.8%;   Score 215.6;  DB 10;  Length 1915;
Best Local Similarity   65.6%;  Pred. No. 4.4e-54;
Matches  449;  Conservative   0;  Mismatches 204;  Indels 31;  Gaps  8;

Qy  6999 AGGTATTACTACAAACGGAGATCCTGAACGGGTGATGGCCGACGGCTCGTCTACAAG 7058
         |||| ||||||||||||||||||||||||||||||||||||| |||| ||||||||||
Db  1119 AGGTACTACTACAAACGGAGATCCTGAACGGGTGATGGCCGGCGACTCGTCTACAAG 1178

Qy  7059 TTTGGCAAGAACTCTAGTGGCTTGGAAGGAAGAGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
         |||||||| |||||| || ||| |||||||| ||||||||  |||||||||||  |  ||
Db  1179 TTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGAGGG 1238

Qy  7119 TCGGGGCTGACCCAAGGACCCCCCTTAACATGGACCCTGTGTTGCTGTAGAGAG 7178
         | || |  |   |||||| |||| |||| ||||  |  |||||||||||| ||||
Db  1239 TTGGAACTATACCCGGGAATGG--CCCCTCCACTGGGAATGCTCCCAGCTGTGCTGTGTGGAGAG 1298

Qy  7179 GGACAGGCAGGCCTGACCGCGCCCCCTTAACATGGACCCTGTGTTGCTGTAGAGAG 7238
         ||||||||||||| ||||  |  ||||  |  ||||  ||||||||||||| |||||
Db  1299 GGACAGGCAGGCCAGCCAGATGG--CCCCTCCACTGGGAATGCTCCCAGCTGTGCTGTGTGGAGAG 1357

Qy  7239 GAAGAACCTGTTGGGCGTGCCCCTGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
         ||| ||| ||||| |||| | | | |    ||||||| ||||  || || | |||| |
Db  1358 AAGCTGATGTTTTGTGTATTGTCAGCCATCGTCCTGGGACTCGGAGACTATGGCCTCGC 1417

Qy  7294 --TCTCCTCGCCCTCTTGGAATTACAAGCCCGGGTTTGAACCAACTTGTTCGA----- 7345
            |  ||| | |||||||||||||||||||| | ||||||  |||| |||| |
Db  1418 CTCCCCACCCTCCTCTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1477

Qy  7346 --------TAACTCTTCCAGCTGTGATTCCAGTTCCCTCCGTCCAACATGGACTGCAA 7397
                 |  | |||||| | |  ||   |   |||||| | | ||||||||  |  ||
Db  1478 AGTGTATCTCCTTTATCTCGTGTGCCTCCTCAAACCCAGTCTCAGACTCAGACA 1537

Qy  7398 ATGAGACCCACCTGCAGATGCTCGCCTCAGCCAAGGAGCTGTGGCAGGA 7457
         |   ||||| || |||||||| |||| ||| |||||||| | || |||||
Db  1538 ACACCTTCCTCCTGCAGACTGCTCGAGACTGAGGAGCCTCAGGG---GAGGGCCTAGGG 1595

Qy  7458 GACTGCAGGGACGGAGGGGACAGGGTTGGTGTCTCGG----TACTTCCTGGACTGCCTTC 7513
         |||| ||||| || || ||| ||  | ||||||||||    ||||| ||||||||| |||
Db  1596 GAGCACCGTGATGGAGGAGGACAGAGCAGGGGTCTCCAGACACCTTCTTTCTTCTGGACTGGCGTT 1655

Qy  7514 CACCTCTTTGCTCAGTACTCAGGTCTCAGGCTCCACAGACGGGGGTCGGATCA-TCCCTAATTTATG 7572
         ||||||||||||||| | | |||| |||| |||| ||||||||||| ||| |  ||||| |||||||
Db  1656 CACCTCTTTGCTCAGTACTCAGGGGTCCGGATCA-TCCCTAATTTATG 1715

Qy  7573 TGC---TATAAATATTCCAGGTGTATATAGAGAGCTATTTTTTCTAAAGCATTCCCCTCC 7630
         |||    |  |  ||||| ||| |||||| ||||||| |||||||| | |||| |||||||
Db  1716 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTTCTAAAACATTCCCCTCCC 1775

Qy  7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
         |||||||||||||| || |||||||
Db  1776 CACTCCTCTCCCACAGAGTGCTGG 1799
```

RESULT 3
US-09-964-824A-563
; Sequence 563, Application US/09964824A
; Patent No. US2002010253 1A1
; GENERAL INFORMATION:

```
; PRIOR APPLICATION NUMBER: 60/323,580
; PRIOR FILING DATE: 2001-09-19
; NUMBER OF SEQ ID NOS: 363
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 74
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-097-340-74

Query Match         2.8%;   Score 216;  DB 15;  Length 1907;
Best Local Similarity   66.7%;  Pred. No. 3.3e-54;
Matches  456;  Conservative   0;  Mismatches 195;  Indels 33;  Gaps  9;

Qy  6999 AGGTATTACTACAAACGGAGATCCTGAACGGGTGATGGCCGACGGCTCGTCTACAAG 7058
         |||| ||||||||||||||||||||||||||||||||||||| |||| ||||||||||
Db  1095 AGGTACTACTACAAACGGAGATCCTGAACGGGTGATGGCCGGCGACTCGTCTACAAG 1154

Qy  7059 TTTGGCAAGAACTCTAGTGGCTTGGAAGGAAGAGAGGTTCTCCAGAGTCGGAATTAAGGA 7118
         |||||||| |||||| || ||| |||||||| ||||||||||||||||||||  |  ||
Db  1155 TTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGAGGG 1214

Qy  7119 TCGGGGCTGACCCAAGGACCACTCAGGCATGAACTCAGCTCGAAGCCTTCCTGGAA 7178
         | || |  |   |||||| || |||| |||||||||||| ||| |||||||||| ||
Db  1215 TTGGAACTATACCCGGGACCAAACCTTCACGGACCACTCGAGGCCTGCAAACCTTCCTGGGA 1274

Qy  7179 GGACAGGCAGGCCTGACCGCGCCCCCTTAACATGGACCCTGTGTTGCTGTGTGGAGAG 7238
         ||||||||||||| ||||  |  ||||  |  ||||  |  |||||||||||| |||||
Db  1275 GGACAGGCAGGCCAGATGG--CCCCTCCACTGGGAATGCTGCTGTGCTGTGTGGAGAG 1333

Qy  7239 GAAGAACCTGTTGGGCGTGCCCCTGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
         ||| ||| ||||| |||| | | | |    ||||||| ||||  || || | |||| |
Db  1334 AAGCTGATGTTTTGTGTATTGTCAGCCATCGTCCTGGGACTCGGAGACTATGGCCTCGC 1393

Qy  7294 --TCTCCTCGCCCTCTTGGAATTACAAGCCCGGGTTTGAACCAACTTGT-------- 7341
            |  ||| | |||||||||||||||||||| | ||||||  |||| |||
Db  1394 CTCCCCACCCTCCTCTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1453

Qy  7342 --TCGATAACTCTTCCAGCTGTGATTCCAGTTCCCTCCGTCCCACATGTGTGGCAGG 7399
            | ||  | ||||| | | ||   |   |||||| | ||| |||||||||| |||
Db  1454 AGTGTATCTCCTTTATCTGGTGCCTCCTCAAACCCAGTCTCAGACTCTAAATGCAGAC 1513

Qy  7400 GAGAC---CCAACTGCAGGATGCCTGGCCTCGCCGCAGGAGGTGGGACTGTGTGGCAGG 7456
         |||||    |   ||| || ||| | ||| || |||||||| | || ||||| |||||||
Db  1514 ACACCTTCTTCCTGCAGACTTGACTGAGCCCAAGGAGGCCTTGGGAGGGCCT----AG 1569

Qy  7457 AGACTGCAGGGACGGAGGGGACAGGGTTGTGTCTCGGTACTTC---CTGGACTGCCTTC 7513
         || || ||||| || || ||| ||  | | |||||||| |||    |||||||| ||||
Db  1570 GGAGCACCGTGATGGAGGAGGACAGAGCAGTGGCTCCAGCACTTCTTTCTTCTGGACTGGCGTT 1629

Qy  7514 CACCTCTTTGCTCAGTACTCAGGCTCGGGGTGCTCCACAGACGGGGGTCTATTTTTTCTAAAGCATTCCCCTCC 7572
         |||||||||||||||||||||| || |||| | ||||||||||||||  |||||||||| |||||||||||||||
Db  1630 CACCTCCTGCTTGGGCTCCAGTGGGTCCAGGGGTCAGGGGTCTATTTTTTCTAAAGCATTCCCCTCC 1689

Qy  7573 TGCTATA--AATATTCCAGGTGTATATAGAGAGCTATTTTTTCTAAACAACATTCCCCTCCC 7630
         ||||||    ||||| ||| || |||||| ||||||||||||||||   || |||||||||||
Db  1690 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTTCTAAAACAATTCCCCTCCC 1749

Qy  7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
         |||||||||||||| || |||||||
Db  1750 CACTCCTCTCCCACAGAGTGCTGG 1773
```

RESULT 2
US-09-964-824A-101
; Sequence 101, Application US/09964824A
; Patent No. US2002010253 1A1
; GENERAL INFORMATION:
; APPLICANT: Horrigan, Stephen
; TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu[...]
; TITLE OF INVENTION: Sets
; FILE REFERENCE: 689290-73
; CURRENT APPLICATION NUMBER: US/09/964,824A

; APPLICANT: Horrigan, Stephen
; TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
; TITLE OF INVENTION: Sets
; FILE REFERENCE: 689290-73
; CURRENT APPLICATION NUMBER: US/09/964,824A
; CURRENT FILING DATE: 2001-09-27
; PRIOR APPLICATION NUMBER: US/60/236,033
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,032
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,028
; PRIOR FILING DATE: 2000-09-28
; NUMBER OF SEQ ID NOS: 583
; SEQ ID NO 563
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-964-824A-563

Query Match   2.8%; Score 215.6; DB 10; Length 1915;
Best Local Similarity 65.6%; Pred. No. 4.4e-54;
Matches 449; Conservative 0; Mismatches 204; Indels 31; Gaps 8;

Qy   6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGACGGCTCGTCTACAAG 7058
Db   1119 AGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGACGGTCGTCTACAAG 1178

Qy   7059 TTTGGCAAGAACTCAGTGCTGGAAGGAAGAGGTTGGAGAGAGGTTGAGAGAGTCGGAATTAAGGA 7118
Db   1179 TTTGGCAAAAACTCAAGCGGTGGAAGGAGGAGGAGGAGGTTCCAGAGTCGGAACTGAGGG 1238

Qy   7119 TCGGGGCTGGACCCAGGACCTGACTCAGGCATGAACTCCAGAACTGAAGCCTTCCTGGAA 7178
Db   1239 TTGGAACTATACCCGGACCAAACTCACCGGACCCTGCAAACCTTCCTGGGA 1298

Qy   7179 GGACAGGCAGGCCTGACGGCCCCCTTAACATGGATGGTTCCCTGTGTTGCTGTGAGAG 7238
Db   1299 GGACAGGCAGGCCAGATGG--CCCCTCCACTGGGAATGCTCCCAGCTGCTGCGTGCGTGAGAG 1357

Qy   7239 GAAGAACCTGTTGGGCGTGCCCTCGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
Db   1358 AAGCTGATGTTTTGGTGTATTGTCAGCCATCGTCCTGGGTATGTCAGCATGCCGTATTGTTCGA 1417

Qy   7294 --TCTCCTCGCCCTTGGAATTACAAGCCCCGGGTTTGAACCAACTTGTTCA------ 7345
Db   1418 AAGCTGATGTTTTGGTGTATTGTCAGCCATGCCCTCGGGAACCAACTTGTTCGA 1477

Qy   7346 --TCTCCTCGCCCTTGGAATTACAAGCCCTGGGTTTGAAGCTGACTTATAGCTGCA 7397
Db   1478 CTCCCCACCCTCCTCTTGGAATTACAAGCCCTGGGTTTGAGCTGACTTATAGCTGCA 1537

Qy   7398 ATGAGAACCACCTGCAGATGCCTGGCCTCAGCTGGGGAGACTGTGGCAGGA 7457
Db   1538 ACACCTTCCTCCTGCAGACACCTGGACTGAGCCAAGGAGGCCTGGG--GAGGCCCTAGGG 1595

Qy   7458 GACTCGCAGGGACGGAGGGGGACAGGGTTGTGTCCTCGG----TACTTCCTGGACTGCCTTC 7513
Db   1596 GAGCACCGTGATGGATGGAGACAGCAGAGGGGCTCCAGCACCTTCTTTCTGGACTGGCGTT 1655

Qy   7514 CACCTCTTTGCTCAGTACTCAGGGTCGGATCA-TCCCTAATTTATG 7572
Db   1656 CACCTCCCTGCTCAGTGCTTGGGTCCACGGGTCAGAGCACTCCCTAATTTATG 1715

Qy   7573 TGC--TATAAATATTCCAGGTGTATATAGAGAGCTATTTTTTCTAAAGCATTTCCCCTCC 7630
Db   1716 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTTCTAAAAACATTTCCCCTCC 1775

Qy   7631 CTGCTCTTCCCACTGAGTGCTGG 7654
Db   1776 CACTCCCTGCTCCCACAGAGTGCTGG 1799

RESULT 4
US-09-880-107-3420
; Sequence 3420, Application US/09880107
; Patent No. US20020142981A1
; GENERAL INFORMATION:
; APPLICANT: Horne, Darci T.
; APPLICANT: Vockley, Joseph G.
; APPLICANT: Scherf, Uwe
; APPLICANT: Gene Logic, Inc.
; TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
; FILE REFERENCE: 44921-5028-WO
; CURRENT APPLICATION NUMBER: US/09/880,107
; CURRENT FILING DATE: 2001-06-14
; PRIOR APPLICATION NUMBER: US 60/211,379
; PRIOR FILING DATE: 2000-06-14
; PRIOR APPLICATION NUMBER: US 60/237,054
; PRIOR FILING DATE: 2000-10-02
; NUMBER OF SEQ ID NOS: 3950
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3420
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Genbank Accession No. US20020142981A1 U73843
US-09-880-107-3420

Query Match   2.8%; Score 215.6; DB 10; Length 1915;
Best Local Similarity 65.6%; Pred. No. 4.4e-54;
Matches 449; Conservative 0; Mismatches 204; Indels 31; Gaps 8;

Qy   6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGACGGCTCGTCTACAAG 7058
Db   1119 AGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGACGGTCGTCTACAAG 1178

Qy   7059 TTTGGCAAGAACTCAGTGGTGGAAGGAAGAGGTTGGAGAGAGGTTGAGAGAGTCGGAATTAAGGA 7118
Db   1179 TTTGGCAAAAACTCAAGCGGCGGAAGGAGGAGGAGGAGGTTCCAGAGTCGGAACTGAGGG 1238

Qy   7119 TCGGGGCTGGACCCAGGACCTGACTCAGGCATGAACTCCAGAACTGAAGCCTTCCTGGAA 7178
Db   1239 TTGGAACTATACCCGGACCAAACTCACCGGACCAAACTTCCTGAGGCCTCCAAACCTTCCTGGA 1298

Qy   7179 GGACAGGCAGGCCTGACGGCCCCCTTAACATGGATGGTTCCCTGTGTTGCTGTCTGTGAGAG 7238
Db   1299 GGACAGGCAGGCCAGATGG--CCCCTCCACTGGGAATGCTCCCAGCTGTGTGTCTGTGAGAG 1357

Qy   7239 GAAGAACCTGTTGGGCGTGCCCTCTGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
Db   1358 AAGCTGATGTTTTGGTGTATTGTCAGCCATCGTCCTGGGACTATGCCCTCGC 1417

Qy   7294 --TCTCCTCGCCCTTGGAATTACAAGCCCCGGGTTTGAACCAACTTGTTCGA------ 7345
Db   1418 AAGCTGATGTTTTATCTGTGTCCTCCTCAAACCCAGTCTCAGACACTAAATGCAGACA 1477

Qy   7346 --------TAACTCTTCCAGCTGTGATTCCAGTTCCCTCCCGTCCCAACATGGACTGCAA 7397
Db   1478 AGTGTATCTCCTTTATCTGGTCGCCTCCTCAAACCCAGTCTCAGACACTAAATGCAGACA 1537

Qy   7398 ATGAGAACCACCTGCAGATGCCTGGCCTCAGCTGGGGAGACTGTGGCAGGA 7457
Db   1538 ACACCTTCCTCCTGCAGACACCTGGACTGAGCCAAGGAGGCCTGGG--GAGGCCCTAGGG 1595

Qy   7458 GACTCGCAGGGACGGAGGGGGACAGGGTTGTGTCCTCGG----TACTTCCTGGACTGCCTTC 7513
Db   1596 GAGCACCGTGATGGATGGAGACAGCAGAGGGGCTCCAGCACCTTCTTTCTGGACTGGCGTT 1655

Qy   7514 CACCTCTTTGCTCAGTACTCAGGCTCCAGGATCA-TCCCTAATTTATG 7572
Db   1656 CACCTCCCTGCTCAGTGCTTGGGTTCACGGGTCAGAGCACTCCCTAATTTATG 1715

Qy   7573 TGC--TATAAATATTCCAGGTGTATATAGAGAGCTATTTTTTCTAAAGCATTTCCCCTCC 7630

```
Db   1716 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTTCTAAAACATTCCCCTCCC 1775

RESULT 5
US-09-967-768A-192
; Sequence 192, Application US/09967768A
; Patent No. US2002015087A1
; GENERAL INFORMATION:
;   APPLICANT: Augustus, Meena
;   TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;   TITLE OF INVENTION: Sets
;   FILE REFERENCE: 689290-72
;   CURRENT APPLICATION NUMBER: US/09/967,768A
;   CURRENT FILING DATE: 2001-09-28
;   PRIOR APPLICATION NUMBER: US/60/236,109
;   PRIOR FILING DATE: 2000-09-28
;   PRIOR APPLICATION NUMBER: US/60/236,034
;   PRIOR FILING DATE: 2000-09-28
;   PRIOR APPLICATION NUMBER: US/60/236,111
;   PRIOR FILING DATE: 2000-09-28
;   NUMBER OF SEQ ID NOS: 325
;   SOFTWARE: PatentIn version 3.0
; SEQ ID NO 192
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-967-768A-192

Query Match             2.8%;  Score 215.6;  DB 10;  Length 1915;
Best Local Similarity  65.6%;  Pred. No. 4.4e-54;
Matches   449;  Conservative    0;  Mismatches  204;  Indels   31;  Gaps    8;

Qy 6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGACGGCTCGTCTACAAG 7058
             |||||||||||||||| ||||| |||||||||||||||| |||||||||||||||||||
Db 1119 AGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGGACTCGTCTACAAG 1178

Qy 7059 TTTGGCAAGAACTCTAGTGGCTGGAAGAAGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
             ||||||||||||||||| |||||||||| ||||||||||||||||||| |||||
Db 1179 TTTGGCAAAAACTCAAGCGGCTGGAAGAAGAGGTTCTCCAGAGTCGGAACTGAGGG 1238

Qy 7119 TCGGGGCTGGACCCAGGACCTGACTCAGGCATGGAACTCCAGAACTGAAGCCTTCCTGGAA 7178
             |||||||||||||||||| || |||||||||||| ||  || || || ||||| |||
Db 1239 TTGGAACTATACCCGGGACCAAAACTCACGGACCACTCGAGGGCGTGCAAAACCTTCCTGGGA 1298

Qy 7179 GGACAGGCAGGCCAGATGG-CCCCTCCACTGGGAAATGCTCCCAGCGTGTGCTGCTGGAGAG 7238
             |||||||||||||||| ||| ||||||||||||| |||||||||||| |||||||||||
Db 1299 GGACAGGCAGGCCAGATCG-CCCCTCCACTGGGAATGCTCCCAGCTGTGCTGTGCTGTGGAGAG 1357

Qy 7239 GAAGAACCTGTTGGGCGTGCCCCTCTGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
             |||||||||||||||||||||| |||||   ||||||| ||||||||||| ||||||||
Db 1358 AAGCTGATGTTTTTGGTGTATTGTCAGCCATCGTCCTGGGACTATGGCCTCGCC 1417

Qy 7294 --TCTCCTCGCCCTTCTTGGAATTACAAGCCCCGGGTTTGAACCAACTTGTTCGA------- 7345
               |||||||||||||||||||||||||| |||||||||||| |||||||||||
Db 1418 CTCCCCACCCTCCTCTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1477

Qy 7346 -------TAACTCTTCAGTCTGATTCAGTTCCTCCGTCCAACATGGACTGCAA 7397
                    ||||||||||||||||||||||||||||||||||||||||||||
Db 1478 AGTGTATCTCCTTTTATCTGGTCGCTCCTCAAACCCAGTCTCAGACACTAAATGCAGACA 1537

Qy 7398 ATGAGACCCACCTGCAGATGCCTGGCCTGACGCACGTCCAGGCTGGGGAGACTGTGGCAGGA 7457
             |||||||||||||||||||| |||||||||||||||||||||||||||||||||||
Db 1538 ACACCTTCCTCCTGACTGAGCCCAAGAGGACCCTGGG--GAGCCCTAGGG 1595

Qy 7458 GACTGCAGGAGACGGAGGGAGACAGGGTTGTGTCCGG----TACTTCCTGGACTGCCTTC 7513
             |||||||||||||||||||||||||||||||||||     ||||||||||||||||||
Db 1596 GAGCACCGTGATGGAGAGACAGAGCAGGGGTCCACAGCGGGGTCGGATCA-TCCCTAATTTATG 1655

Qy 7514 CACCTCTTTGCTCAGTACTCAGTCTCAGGCTCCACAGACGGGGGTCGGATCA-TCCCTAATTTATG 7572
             ||||||||||||||||||||||||| |||||||||||||||||||||||| ||||||||||||
Db 1716 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTTCTAAAACATTCCCCTCCC 1775
```

```
Db   1656 CACCTCCCTGCTCAGTGCTTGGCTCCACGGGGCAGGGGTCCAGGAGCACTCCCTAATTTATG 1715

Qy   7573 TGC--TATAAAATATTCCAGGTGTATATAGAGAGCTATTTTTTCTAAAGCATTCCCCTCC 7630
               ||  ||||||||||||||||||||||||||||||||||||||||  |||||||||||||
Db   1716 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTTCTAAAACATTCCCCCTCCC 1775

Qy   7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
               |||||||||||||||||||||||||
Db   1776 CACTCCTCTCCCACAGAGTGCTGG 1799

RESULT 6
US-09-922-217-1105
; Sequence 1105, Application US/09922217
; Patent No. US2002007641A1
; GENERAL INFORMATION:
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Lodes, Michael J.
;   APPLICANT: Secrist, Heather
;   APPLICANT: Benson, Darin R.
;   APPLICANT: Meagher, Madeleine Joy
;   APPLICANT: Stolk, John A.
;   APPLICANT: Wang, Tongtong
;   APPLICANT: Jiang, Yuqiu
;   APPLICANT: Smith, Carole Lynn
;   APPLICANT: King, Gordon E.
;   APPLICANT: Wang, Aijun
;   APPLICANT: Clapper, Jonathan D.
;   TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;   TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.471C13
;   CURRENT APPLICATION NUMBER: US/09/922,217
;   CURRENT FILING DATE: 2001-08-03
;   NUMBER OF SEQ ID NOS: 1124
;   SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
;   LENGTH: 1917
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-922-217-1105

Query Match             2.8%;  Score 215.6;  DB 9;  Length 1917;
Best Local Similarity  65.6%;  Pred. No. 4.4e-54;
Matches   449;  Conservative    0;  Mismatches  204;  Indels   31;  Gaps    8;

Qy 6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGACGGCTCGTCTACAAG 7058
             |||||||||||||||| ||||| |||||||||||||||| |||||||||||||||||||
Db 1121 AGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGGACTCGTCTACAAG 1180

Qy 7059 TTTGGCAAGAACTCTAGTGGCTGGAAGAAGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
             ||||||||||||||||| |||||||||| ||||||||||||||||||| |||||
Db 1181 TTTGGCAAAAACTCAAGCGGCTGGAAGAAGAGGTTCTCCAGAGTCGGAACTGAGGG 1240

Qy 7119 TCGGGGCTGGACCCAGGACCTGACTCAGGCATGGAACTCCAGAACTGAAGCCTTCCTGGAA 7178
             |||||||||||||||||| || |||||||||||| ||  || || || ||||| |||
Db 1241 TTGGAACTATACCCGGGACCAAAACTCACGGACCACTCGAGGGCGTGCAAAACCTTCCTGGGA 1300

Qy 7179 GGACAGGCAGGCCAGATGG-CCCCTCCACTGGGAAATGCTCCCAGCGTGTGCTGCTGGAGAG 7238
             |||||||||||||||| ||| ||||||||||||| |||||||||||| |||||||||||
Db 1301 GGACAGGCAGGCCAGATGG-CCCCTCCACTGGGAATGCTCCCAGCTGTGCTGTGCTGTGGAGAG 1359

Qy 7239 GAAGAACCTGTTGGGCGTGCCCCTCTGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
             |||||||||||||||||||||| |||||   ||||||| ||||||||||| ||||||||
Db 1360 AAGCTGATGTTTTTGGTGTATTGTCAGCCATCGTCCTGGGACTATGGCCTCGCC 1419

Qy 7294 --TCTCCTCGCCCTTCTTGGAATTACAAGCCCCGGGTTTGAACCAACTTGTTCGA------- 7345
               |||||||||||||||||||||||||| |||||||||||| |||||||||||
Db 1420 CTCCCCACCCTCCTCTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1479

Qy 7346 -------TAACTCTTCAGTCTGATTCAGTTCCTCCGTCCAACATGGACTGCAA 7397
                    ||||||| ||||||||||||||||||||||||||||||||||||
Db 1480 AGTGTATCTCCTTTTATCTGGTCGCTCCTCAAACCCAGTCTCAGACACTAAATGCAGACA 1539
```

```
Qy   7398 ATGAGACCCACCTGCAGATGCCTCAGCCGCCAAGGAGGAGGCTGGGAGGACTGTGGCAGGA 7457
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1540 ACACCTTCCTCCTGCAGACACCTGGACTTGTGTCTCGG----GAGGCCCTAGGG 1597
Qy   7458 GACTGCAGGGACGGAGGAGGACAGAGCAGGGTTGTGTCTCGG----TACTTCCTGGACTGCCTTC 7513
Db   1598 GAGCACCGTGATGGAGGACAGAGCAGGGTCGGATCA-TCCCTAATTTATG 1657
Qy   7514 CACTCCTTTGCTCAGTACTCAGGCTCCACAGACGGGGTCGGATCA-TCCCTAATTTATG 7572
Db   1658 CACCTCCCTGCTTCAGTGCTTGGGCTCCAGCACCTCTTTTCTGGACTGGCGTT 1717
Qy   7573 TGC--TATAAATATTCCAGTGTATATAGAGCATTTTTCTAAAGCATTCCCCTCC 7630
Db   1718 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTCTAAAACATTCCCCTCCC 1777
Qy   7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
Db   1778 CACTCCTCCTCCCACAGAGTGCTGG 1801
```

RESULT 7
US-10-025-380-1105
; Sequence 1105, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole L.
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Skeiky, Yasir A. W.
; APPLICANT: Fanger, Gary R.
; APPLICANT: Vedvick, Thomas S.
; APPLICANT: Carter, Darrick
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C14
; CURRENT APPLICATION NUMBER: US/10/025,380
; CURRENT FILING DATE: 2001-12-19
; NUMBER OF SEQ ID NOS: 1129
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
; LENGTH: 1917
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-025-380-1105

Query Match   2.8%; Score 215.6; DB 14; Length 1917;
Best Local Similarity   65.6%; Pred. No. 4.4e-54;
Matches 449; Conservative   0; Mismatches 204; Indels 31; Gaps 8;

```
Qy   6999 AGGTATTACTACAAACGGAGATCCTGGAATGGCCCACGGCTCGTCGTCGTCTCGTCTACAAG 7058
Db   1121 AGGTACTACTACAAACGGAGATCCTGGAATGGCCCGGCGACTCGTCGTCTACAAG 1180
Qy   7059 TTTGGCAAGAACTCTAGTGCTGGAAGGAAGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
Db   1181 TTTGGCAAAAACTCAGCGGCTGGAAGGAGGAGGAGGAGTTCTCCAGAGTCGGAACTGAGGG 1240
Qy   7119 TCGGGGCTGGACCCAGACCTGACTCAGGCCATGAACCGACCACTGACGACCTTCCTGGAA 7178
Db   1241 TTGGAACTATACCCGGACCAAAACTCACGGACCACCTTCCTGGGA 1300
Qy   7179 GGACAGGCAGGCCTCAGCCTGCCTCAGCCGCCAAGGAGGAGGCTGTGTTGCTGTAGAGAG 7238
```

```
Db   1301 GGACAGGCAGGCCAGATGG-CCCCTCCACTGGGAGAATGCTCCCAGCTGTGCTGTGGAGAG 1359
Qy   7239 GAAGAACCTGTTGGGCGTGCCCTCCTGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
Db   1360 AAGCTGATGTTTGTGATTGTCAGCAGCCATCGTCCTCGGACTGCCGGAGACTATGGCCTCGC 1419
Qy   7294 --TCTCCTGCCCTCTTGGAATTACAAGCCCCGGGTTGAACCAACTTGTTCGA------- 7345
Db   1420 CTCCCCACCCTCTCTTGGAATTACAAGCCCTGGGTTTGAAGCTGACTTTATAGCTGCA 1479
Qy   7346 ------TAACTTCTTCCAGCTGTGATTCGTTCCAGTTCCTCCGTCCCAACATGGACTGCAA 7397
Db   1480 AGTGTATCTCCTTTATCTGGTGCCTCCTCAAACCCAGTCTCAGACACTAAATGCAGACA 1539
Qy   7398 ATGAGACCCACCTGCAGATGCCTCAGCCGCCAAGGAGGAGGCTGGGAGGACTGTGGCAGGA 7457
Db   1540 AATGAGACCCACCTGCAGACACCTGGACTTGTGTCTCGG----GAGGCCCTAGGG 1597
Qy   7458 GACTGCAGGGACGGAGGAGGACAGAGCAGGGTTGTGTCTCGG----TACTTCCTGGACTGCCTTC 7513
Db   1598 GAGCACCGTGATGGAGGACAGAGCAGGGTCGGATCA-TCCCTAATTTATG 1657
Qy   7514 CACTCCTTTGCTCAGTACTCAGGCTCCACAGACGGGGGTCGGATCA-TCCCTAATTTATG 7572
Db   1658 CACCTCCCTGCTTCAGTGCTTGGGCTCCAGCACCTCTTTTCTGGACTGGCGTT 1717
Qy   7573 TGC--TATAAATATTCCAGTGTATATAGAGCATTTTTCTAAAGCATTCCCCTCC 7630
Db   1718 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTCTAAAACATTCCCCTCCC 1777
Qy   7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
Db   1778 CACTCCTCCTCCCACAGAGTGCTGG 1801
```

RESULT 8
US-10-264-049-756
; Sequence 756, Application US/10264049
; Publication No. US20040005579A1
; GENERAL INFORMATION:
; APPLICANT: Birse et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
; FILE REFERENCE: PA133P1
; CURRENT APPLICATION NUMBER: US/10/264,049
; CURRENT FILING DATE: 2002-10-04
; PRIOR APPLICATION NUMBER: PCT/US01/18569
; PRIOR FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: US 60/209,467
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 4360
; SOFTWARE: PatentIn Ver. 3.1
; SEQ ID NO 756
; LENGTH: 1956
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-264-049-756

Query Match   2.8%; Score 215.6; DB 12; Length 1956;
Best Local Similarity   65.6%; Pred. No. 4.4e-54;
Matches 449; Conservative   0; Mismatches 204; Indels 31; Gaps 8;

```
Qy   6999 AGGTATTACTACAAACGGAGATCCTGGAATGGCCCGACGGGCTCGTCGTCTACAAG 7058
Db   1160 AGGTACTACTACAAACGGAGATCCTGGAATGGCCCGGCGACTCGTCGTCTACAAG 1219
Qy   7059 TTTGGCAAGAACTCTAGTGCTGGAAGGAAGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
Db   1220 TTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAGGAGGAGTTCTCCAGAGTCGGAACTGAGGG 1279
Qy   7119 TCGGGGCTGGACCCAGACCTGACTCAGGCCATGAACCGACCACTGACGACCTTCCTGGAA 7178
Db   1280 TTGGAACTATACCCGGACCAAAACTCACGGACCACCTTCCTGGGA 1339
```

```
Db 1260 TTGGAACTATACCCGGACCCAAACTCACGGACCACTGACGACCTGAGGCCTCGAAACCTTCCTCGGGA 1319
Qy 7179 GGACAGGCAGGCCTGACGGCCCCCTTAACATGGATGGTGTTCCCTGTGTTGCTGTGTGGAGAG 7238
Db 1320 GGACAGGCAGGCCAGCAGGCCAGATGG-CCCCTCCACTGGGGAATGCTCCCAGCTGTGCTGTGGAGAG 1378
Qy 7239 GAAGAACCTGTTGGGCGTGCCCTCTGC---AGTCTCCTCAAGTGCAGCCTTGGCCTC-- 7293
Db 1379 AAGCTGATGTTTTGGTGTATTGTCAGCCATCGTCCTGGGACTCGGAGACTATGGCCTCGC 1438
Qy 7294 --TCTCCTGCCCTCTTGGAATTACAAGCCCGGGTTTGAACCAACTTGTTCGA------ 7345
Db 1439 CTCCCCACCCTCCTCTTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1498
Qy 7346 -------TAACTTCTTCCAGCTGTGATTCCAGTTCCTCCGTCCCAACATGGACTGCAA 7397
Db 1499 AGTGTATCTCCTTTATCTGGTGCCTCTCAAACCCAGTCTCAGACACTAAATGCAGACA 1558
Qy 7398 ATGAGACCCACCTGCAGATGCCTGGCCTCAGCCAAGGAGGCTGGGGAGACTGTGGCAGGA 7457
Db 1559 ACACCTTCCTCCTGCAGACACCTGGACTGAGCCAAGAGGCCAAGAGGCCTGGG--GAGGCCCTAGGG 1616
Qy 7458 GACTGCAGGGACGGAGGGGACAGAGGTTGTGTCCTCGG----TACTTCCTGGACTGCCTTC 7513
Db 1617 GAGCACCGTGATGGAGGAGAGGAGCTCCACGACCTTCTTTCTGGACTGGCGTT 1676
Qy 7514 CACCTCTTTGCTCAGTACTCAGGCTCGGATCA-TCCCTAATTTATG 7572
Db 1677 CACCTCCCTGCTCAGTGCTTGGGCTTCGGGCTCAGAGGCACTCCCTAATTTATG 1736
Qy 7573 TGC--TATAAATATTCCAGGTGTATATAGAGCTATTTTTCTAAAGCATTCCCCTCC 7630
Db 1737 TGCTATATAAATATGTCAGATGTACATAGAGATCATATTTTTCTAAAAACATTCCCCTCCC 1796
Qy 7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
Db 1797 CACTCCTCTCCCCACAGAGTGCTGG 1820
```

```
RESULT 10
US-10-131-410-64
; Sequence 64, Application US/10131410
; Publication No. US20030235915A1
; GENERAL INFORMATION:
;   APPLICANT: SPECHT, THOMAS
;   APPLICANT: HINZMANN, BERND
;   APPLICANT: SCHMITT, ARMIN
;   APPLICANT: PILARSKY, CHRISTIAN
;   APPLICANT: DAHL, EDGAR
;   APPLICANT: ROSENTHAL, ANDRE
;   TITLE OF INVENTION: HUMAN NUCLEIC ACID SEQUENCES FROM TISSUE OF BREAST
;   TITLE OF INVENTION: TUMORS
;   FILE REFERENCE: SCH-1763
;   CURRENT APPLICATION NUMBER: US/10/131,410
;   CURRENT FILING DATE: 2002-04-25
;   PRIOR APPLICATION NUMBER: 09/646,673
;   PRIOR FILING DATE: 2000-09-20
;   PRIOR APPLICATION NUMBER: PCT/DE99/00908
;   PRIOR FILING DATE: 1999-03-19
;   NUMBER OF SEQ ID NOS: 202
;   SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 64
;   LENGTH: 2269
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-131-410-64

Query Match     2.8%;  Score 215.6;  DB 12;  Length 2269;
Best Local Similarity   65.6%;  Pred. No. 4.9e-54;
Matches  449;  Conservative   0;  Mismatches  204;  Indels  31;  Gaps   8;

Qy 6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGGCGTCGATGGCCGACAGCGTCGTCTACAAG 7058
```

```
Qy 7179 GGACAGGCAGGCCTGACGGCCCCCTTAACATGGATGGTGTTCCCTGTGTGTGCTGTAGAGAG 7238
Db 1340 GGACAGGCAGGCCAGATGG-CCCCTCCACTGGGGAATGCTCCCAGCTGTGCTGTGGAGAG 1398
Qy 7239 GAAGAACCTGTTGGGCGTGCCCTCTGC---AGTCTCCTCAAGTGCAGCCTTGGCCTC-- 7293
Db 1399 AAGCTGATGTTTTGGTGTATTGTCAGCCATCGTCCTGGGACTCGGAGACTATGGCCTCGC 1458
Qy 7294 --TCTCCTGCCCTCTTGGAATTACAAGCCCGGGTTTGAACCAACTTGTTCGA------ 7345
Db 1459 CTCCCCACCCTCCTCTTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1518
Qy 7346 -------TAACTCTTCCAGCTGTGATTCCAGTTCCTCAAACCCAGTCTCAGACACTAAATGCAGACA 7397
Db 1519 AGTGTATCTCCTTTATCTGGTGCCTCTCAAACCCAGTCTCAGACACTAAATGCAGACA 1578
Qy 7398 ATGAGACCCACCTGCAGATGCCTGGCCTCAGCCAAGGAGGCTGGGGAGACTGTGGCAGGA 7457
Db 1579 ACACCTTCCTCCTGCAGACACCTGGACTGAGCCAAGAGGCCAAGAGGCCTGGG--GAGGCCCTAGGG 1636
Qy 7458 GACTGCAGGGACGGAGGGGACAGAGGTTGTGTCCTCGG----TACTTCCTGGACTGCCTTC 7513
Db 1637 GAGCACCGTGATGGAGGAGAGGAGCTCCACGACCTTCTTTCTGGACTGGCGTT 1696
Qy 7514 CACCTCTTTGCTCAGTACTCAGGCTCGGATCA-TCCCTAATTTATG 7572
Db 1697 CACCTCCCTGCTCAGTGCTTGGGCTTCGGGCTCAGAGGCACTCCCTAATTTATG 1756
Qy 7573 TGC--TATAAATATTCCAGGTGTATATAGAGCTATTTTTCTAAAGCATTCCCCTCC 7630
Db 1757 TGCTATATAAATATGTCAGATGTACATAGAGATCATATTTTTCTAAAAACATTCCCCTCCC 1816
Qy 7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
Db 1817 CACTCCTCTCCCACAGAGTGCTGG 1840
```

```
RESULT 9
US-09-925-301-207
; Sequence 207, Application US/09925301
; Patent No. US2002005230BA1
; GENERAL INFORMATION:
;   APPLICANT: Rosen et al.
;   TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
;   FILE REFERENCE: PA106
;   CURRENT APPLICATION NUMBER: US/09/925,301
;   CURRENT FILING DATE: 2001-08-10
;   PRIOR APPLICATION NUMBER: PCT/US00/05882
;   PRIOR FILING DATE: 2000-03-08
;   PRIOR APPLICATION NUMBER: 60/124,270
;   PRIOR FILING DATE: 1999-03-12
;   NUMBER OF SEQ ID NOS: 1694
;   SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 207
;   LENGTH: 1996
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-925-301-207

Query Match     2.8%;  Score 215.6;  DB 9;  Length 1996;
Best Local Similarity   65.6%;  Pred. No. 4.5e-54;
Matches  449;  Conservative   0;  Mismatches  204;  Indels  31;  Gaps   8;

Qy 6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGGCGTCGATGGCCGACAGCGTCGTCTACAAG 7058
Db 1140 AGGTACTACTACAAACGGGAGATCCTGGAACGGGCTGAACGGGTGAACGGGCCGGCGACTCGTCTACAAG 1199
Qy 7059 TTTGGCAAGAACTTCAGTGGCTGGCAGGAAGAGAAGAGAGTTGGAGAGAGTCGGAATTAAGGA 7118
Db 1200 TTTGGCAAAAAACTCAAGCGGTGGGAAGGAGGAAGAGAGGTTCTCCCAGAGAACTCGGAACTCGGAGGG 1259
Qy 7119 TCGGGGGCTGGACCCAGGACCTCAGGCATGAACCTGAAGCCTTCCTGGAA 7178
```

```
Db   850 AGGTACTACTACAAACGGAGGAGATCCTGGAACGGGATGGCCGGCGACTCGTCTACAAG 909
         ||||| |||||||||  || ||||||||||||||||||||||| ||||||||||||||
Qy  7059 TTTGGCAAGAACTTCAGTGGCTGGAAGGAAGAAGGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
         ||||||  ||| ||||||||||||||||||||||||||||||| ||||||||||||
Db   910 TTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGGAGGTTCTCCAGAGTCGGAACTGAGGG 969

Qy  7119 TCGGGGCTGGACCCAGGAACTCAGCCATGAACTCCAGAACTGAGACCTTCCTGGAA 7178
         || ||||||||||||||||||| |||||||| || ||||||||||||||||||||
Db   970 TTGAACTATACCCCGGACCAAACTCACGGACCACTCGAGGCCTGCAAACCTTCCTGGGA 1029

Qy  7179 GGACAGGCAGGCCTGACGGCCCCCCTTAACATGGATGTGTTCCCTGTGTTGCTGTAGAGAG 7238
         |||||||||||||||||| || |||||  |||  ||  ||  |||||||
Db  1030 GGACAGGCAGGCCAGATGGCCCAGCCCCTCCACTGGGGAATGCTCCCAGCTGTGCTGTGGAGAG 1088

Qy  7239 GAAGAACCTGTTGGGCGTGCCCTCTGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
         |||||| |||| || ||||| |||||      ||  ||||||||||||  ||||| ||
Db  1089 AAGCTGATGTTTTGGTGTATTGTCAGCCATCGTCCTCGGGGACTCCGAGACTATGGCCTCGC 1148

Qy  7294 --TCTCCTCGCCCTTGGAATTACAAGCCCGGGTTGAACCAACTTGTTCGA------ 7345
           |  |||||||  ||||||||||| ||||  ||||||||| || |||||
Db  1149 CTCCCCACCCCTCCTCTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1208

Qy  7346 --------TAACTCTTCCAGCTGTGATTCCAGTTCCTCCCGTCCCAACATGGACTGCAA 7397
                  |||  ||||| | || ||| ||||  ||||||||||||||||
Db  1209 AGTGTATCTCCTTTTATCTGTGCCTCCTCCAAACCCAGTGTCAGACACTAAAATGCAGACA 1268

Qy  7398 ATGAGACCCACCTGCAGATGCCTGCCTCAGCCAAGAGAGCTGGGGAGACTGTGGCAGGA 7457
         |||| |||||||||| |||||||||||||||||||||||||| ||||| ||||||||
Db  1269 ACACCTTCCTCTGCAGACACCTGGACTGAGGAGGCCTGGG--GAGGCCCTAGGG 1326

Qy  7458 GACTGCAGGGACGGAGGGGGACAGGGTTGTGTCCTGG----TACTTCCTGGACTGCCTTC 7513
         |||||||| ||||| |||| |||||||| ||||||      ||| | |||||| |||
Db  1327 GAGCACAGCGTGATGGAGGACAGGAGAGCAGGGGCTCACCTGCTCCAGCACCTTCTTTCTGGACTGGCGTT 1386

Qy  7514 CACCTCTTTGCTCAGTACTCCAGGGGTCGGATCA-TCCCTAATTTATG 7572
         |||||||  || || || ||||| |||  |||||  |||||  ||||
Db  1387 CACCTCCCTGCTCAGTGCTTGGGCTCCACGGCAGGGTGCAGAGCACTCCCTAATTTTATG 1446

Qy  7573 TGC--TATAAAATATTCCAGTGTATATAGAGAGCTATTTTTTCTAAAGCATTCCCCTCC 7630
         |||   |||||| ||   || || || |||||||| ||||||    |||||||||||
Db  1447 TGCTATATAAAATATGTCAGATGTACATAGAGATCTATTTTTTCTAAAACATTCCCCTCCC 1506

Qy  7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
         ||||| || ||||||||||||||
Db  1507 CACTCCTCTCCCACAGAGTGCTGG 1530
```

RESULT 11
US-10-292-798-1601/c
; Sequence 1601, Application US/10292798
; Publication No. US20030235833A1
; GENERAL INFORMATION:
;   APPLICANT: SUWA, MAKIKO
;   APPLICANT: ASAI, KIYOSHI
;   APPLICANT: AKIYAMA, YUTAKA
;   APPLICANT: ABURATANI, HIROYUKI
;   TITLE OF INVENTION: GUANOSINE TRIPHOSPHATE-BINDING PROTEIN COUPLED RECEPTORS
;   FILE REFERENCE: 084335/166
;   CURRENT APPLICATION NUMBER: US/10/292,798
;   CURRENT FILING DATE: 2002-11-13
;   PRIOR APPLICATION NUMBER: 10/017,161
;   PRIOR FILING DATE: 2001-12-18
;   PRIOR APPLICATION NUMBER: JP 2001-246789
;   PRIOR FILING DATE: 2001-06-18
;   NUMBER OF SEQ ID NOS: 2070
;   SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1601
;   LENGTH: 1435
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   LOCATION: source

;   FEATURE:
;   LOCATION: (1)..(1435)
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (201)..(1235)
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (1040)..(1139)
;   OTHER INFORMATION: a, t, c, g, unknown or other
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (1145)..(1145)
;   OTHER INFORMATION: a, t, c, g, unknown or other
US-10-292-798-1601

Query Match   2.4%;   Score 185.8;   DB 12;   Length 1435;
Best Local Similarity   79.4%;   Pred. No. 4.7e-45;
Matches 220;   Conservative   0;   Mismatches 57;   Indels   0;   Gaps   0;

```
Qy  6181 TTCGGGATAGGAGGAGGCCAGGTGCCTCAGAGAGGAGGAGGGGCACCCCAGACTGATAACTGAGG 6240
         |||||| ||||||||||| |||||||||||||||||||| ||||||| ||||| ||||||
Db   442 TGGGGCGGGCAGGGCTGGCTGCCCTTGGGTGAGAGGGGACACTTGGATGGCAAACTGATG 383

Qy  6241 AAATCTTCCCTTGTAGCCCTGGGAGTACTCACCTGTGGGAGTTTATCCGAGACATCCTA 6300
         ||||| || |||||||||| ||||||||||||||||||||| |||||||||||||||
Db   382 GAGGCTGGCCTTGCAGCCCCAGAGGCACCCACCTGTGGGAGTTCATCGCGGGACATCCTC 323

Qy  6301 ATCCACCCGAGCTCAACGAAGGCCTCATGAAGTGGGAGAACCGGCACGAGGGTGTTC 6360
         ||||||||||||||||||||||||||||||||||||||||||||||||| ||||||
Db   322 ATCCACCCGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAGGGCGTCTTC 263

Qy  6361 AAGTTCTTCGCTCAGAGGCCGTGGCCCAACTCTGGGCCCAGAAGAAGAACAGCAAC 6420
         |||||||||||||||||||||||||||||||||||| |||||||||||||||||||
Db   262 AAGTTCCTGCGCTCCAGAGGCTGTGCGCCCAACTATGGGCCCAAAGAAAGAACAGCAAC 203

Qy  6421 ATGACCATGAGAAGCTGAGCCGAGCCATGAGGTGAG 6457
         |||||| |||||||||||||||||| ||||||||||
Db   202 ATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTGAG 166
```

RESULT 12
US-10-017-161-1953/c
; Sequence 1953, Application US/10017161
; Publication No. US2003014366BA1
; GENERAL INFORMATION:
;   APPLICANT: SUWA, MAKIKO
;   APPLICANT: ASAI, KIYOSHI
;   APPLICANT: AKIYAMA, YUTAKA
;   APPLICANT: ABURATANI, HIROYUKI
;   TITLE OF INVENTION: NOVEL G PROTEIN-COUPLED RECEPTORS
;   FILE REFERENCE: 084335/0152
;   CURRENT APPLICATION NUMBER: US/10/017,161
;   CURRENT FILING DATE: 2002-12-18
;   PRIOR APPLICATION NUMBER: JP 2001/246789
;   PRIOR FILING DATE: 2001-06-18
;   NUMBER OF SEQ ID NOS: 2430
;   SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1953
;   LENGTH: 1435
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: source
;   LOCATION: (1)..(1435)
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (201)..(1235)
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (1040)..(1139)
;   OTHER INFORMATION: a, t, c, g, unknown or other
;   FEATURE:
;   NAME/KEY: modified_base

```
;  LOCATION: (1145)
;  OTHER INFORMATION: a, t, c, g, unknown or other
US-10-017-161-1953

Query Match             2.4%;  Score 185.8;  DB 13;  Length 1435;
Best Local Similarity  79.4%;  Pred. No. 4.7e-45;
Matches  220;  Conservative  0;  Mismatches  57;  Indels  0;  Gaps  0;

Qy   6181 TTGGGATAGGAGGAGGCCAGTCGCCTAGAGAGAGGGCACCCCAGACTGATAACTGAGG 6240
          ||||||||||| |||  ||||| |||| ||||||| ||||||||||||||| |||||||
Db.   442 TGGGGCGGGCAGGGCTGGCTGCCCTTGGGTGAGAGGGACACTTGGTGCAAACTGATG  383

Qy   6241 AAATCTTCCCTTGTAGCCCCAGAGTACTCACTGTGGGAGTTTATCCGAGACATCCTA 6300
          ||||||| |||||| |||| |||| ||||||||||||| ||  ||||||||| |||||
Db    382 GAGGCTGGCCTTGCAGCGCCCAGAGGCACCCACCCTGGGAGTTCATCCGGGACATCCTC  323

Qy   6301 ATCCACCCCGAGCTCAACGAAGGCCTCATGAAGTGGAGAACCGGCCACGAGAGGGTGTTC 6360
          ||||||||||||||  ||||| |||||||||||||||||||||| |||||||||| ||||
Db    322 ATCCACCCCGAGCTCAACGAAGGCCTCATGAAGTGGGAGAATCGGCCATGAAGGCGTCTTC  263

Qy   6361 AAGTTCTTCGGCTCAGAGGCCGTGGCCCAACTCTGGGCCCAGAAGAAGAAGAACAGCAAC 6420
          |||||| | ||||| ||| |||||||||||||||||||| |||||||||||| |||||||
Db    262 AAGTTCCTGCGTCCGGAGGCTGTGGCCCAACTATGGGCCCAAAAAGAAAAGAACAGCAAC  203

Qy   6421 ATGACCTATGAGAAGTGAGCCGAGCCATGAGGTGAG 6457
          |||||||| ||||||||| ||||||||||||||| |
Db    202 ATGACCTACGAGAAGTGAGCCGAGCCGGGCCATGAGCGTGAG  166


RESULT 13
US-09-922-217-853/c
;  Sequence 853, Application US/09922217
;  Patent No. US20020076414A1
;  GENERAL INFORMATION:
;    APPLICANT: Xu, Jiangchun
;    APPLICANT: Lodes, Michael J.
;    APPLICANT: Secrist, Heather
;    APPLICANT: Benson, Darin R.
;    APPLICANT: Meagher, Madeleine Joy
;    APPLICANT: Stolk, John A.
;    APPLICANT: Wang, Tongtong
;    APPLICANT: Jiang, Yuqiu
;    APPLICANT: Smith, Carole Lynn
;    APPLICANT: King, Gordon E.
;    APPLICANT: Wang, Aijun
;    APPLICANT: Clapper, Jonathan D.
;    TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;    TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
;    FILE REFERENCE: 210121.471C13
;    CURRENT APPLICATION NUMBER: US/09/922,217
;    CURRENT FILING DATE: 2001-08-03
;    NUMBER OF SEQ ID NOS: 1124
;    SOFTWARE: FastSEQ for Windows Version 4.0
;    SEQ ID NO 853
;    LENGTH: 626
;    TYPE: DNA
;    ORGANISM: Homo sapiens
US-09-922-217-853

Query Match             2.3%;  Score 176.2;  DB 9;  Length 626;
Best Local Similarity  85.6%;  Pred. No. 2.3e-42;
Matches  196;  Conservative  0;  Mismatches  33;  Indels  0;  Gaps  0;

Qy   4147 TGCAGAGAGGCAAGCTGGACTAGCGAGCGCCCCAGTTCTGGTCGAAGACCCAGGTTCT 4206
          |||||||||||||||||||||||| |||||||||||||||||||||||||| ||||||
Db    622 TACAGAGAGGCCAGCTGGTGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCT  563

Qy   4207 GGAGTGGATCAGCTACCAAGTGAGAAGAACAAGTATGACGCCAGCTCCATCGACTTCTC 4266
          |||||||||||| |||||||||||||||||||| ||||| || |||||||||||||||||
Db    562 GGACTGGATCAGCTACCAAGTGAGAAGAACAAGTACGACGCCAAGCGGCCATTGACTTCTC  503

Qy   4267 CCGCTGCAACATGACGAGCGCCACCCCTCGCAGCTGTGCGCTGAGGAGCTGCGCGTAGT 4326
          ||||||  || || ||| ||||||||||||||| ||||| ||||||||||||||||||||
```

```
Db    502 ACGATGTGACATGGATGGGCGCCACCCTCGCAATTGTGCCCTTGGGACCTCAGT 443
          |||||| |||  |||  ||||||||||||| ||||||| |||||||||||||||
Qy   4327 CTTTGGACCTCTGGGAGACCAGCTTCATGCCCTTCGGGACCTTCAGT 4375
          ||||||  ||||||||||| ||||||||||| ||| |||||||||||
Db    442 CTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACT 394


RESULT 14
US-09-833-263-853/c
;  Sequence 853, Application US/09833263
;  Patent No. US20020110547A1
;  GENERAL INFORMATION:
;    APPLICANT: Wang, Aijun
;    APPLICANT: Clapper, Jonathan D.
;    APPLICANT: Stolk, John A.
;    APPLICANT: Meagher, Madeleine J.
;    TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
;    TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
;    FILE REFERENCE: 210121.471C12
;    CURRENT APPLICATION NUMBER: US/09/833,263
;    CURRENT FILING DATE: 2001-04-10
;    NUMBER OF SEQ ID NOS: 1093
;    SOFTWARE: FastSEQ for Windows Version 3.0
;    SEQ ID NO 853
;    LENGTH: 626
;    TYPE: DNA
;    ORGANISM: Homo sapien
US-09-833-263-853

Query Match             2.3%;  Score 176.2;  DB 10;  Length 626;
Best Local Similarity  85.6%;  Pred. No. 2.3e-42;
Matches  196;  Conservative  0;  Mismatches  33;  Indels  0;  Gaps  0;

Qy   4147 TGCAGAGAGGCAAGCTGGACTAGCGAGCGCCCCAGTTCTGGTCGAAGACCCAGGTTCT 4206
          |||||||||||||||||||||||| |||||||||||||||||||||||||| ||||||
Db    622 TACAGAGAGGCCAGCTGGTGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCT  563

Qy   4207 GGAGTGGATCAGCTACCAAGTGAGAAGAACAAGTATGACGCCAGCTCCATCGACTTCTC 4266
          |||||||||||| |||||||||||||||||||| ||||| || |||||||||||||||||
Db    562 GGACTGGATCAGCTACCAAGTGAGAAGAACAAGTACGACGCCAAGCGGCCATTGACTTCTC  503

Qy   4267 CCGCTGCAACATGACGAGCGCCACCCCTCGCAGCTGTGCGCTGAGGAGCTGCGCGTAGT 4326
          ||||||  || || ||| ||||||||||||||| ||||| ||||||||||||||||||||
Db    502 ACGATGTGACATGGATGGGCGCCACCCTCGCAATTGTGCCCTTGGGACCTCAGT 4375
          |||||| |||  |||  ||||||||||||| ||||||| |||||||||||||||
Qy   4327 CTTTGGACCTCTGGGAGACCAGCTTCATGCCCTTCGGGACCTTCAGT 4375
          ||||||  ||||||||||| ||||||||||| ||| |||||||||||
Db    442 CTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACT 394


RESULT 15
US-10-025-380-853/c
;  Sequence 853, Application US/10025380
;  Publication No. US20020182191A1
;  GENERAL INFORMATION:
;    APPLICANT: Xu, Jiangchun
;    APPLICANT: Lodes, Michael J.
;    APPLICANT: Secrist, Heather
;    APPLICANT: Benson, Darin R.
;    APPLICANT: Meagher, Madeleine Joy
;    APPLICANT: Stolk, John A.
;    APPLICANT: Wang, Tongtong
;    APPLICANT: Jiang, Yuqiu
;    APPLICANT: Smith, Carole L.
;    APPLICANT: King, Gordon E.
;    APPLICANT: Wang, Aijun
;    APPLICANT: Clapper, Jonathan D.
;    APPLICANT: Skeiky, Yasir A. W.
;    APPLICANT: Fanger, Gary R.
;    APPLICANT: Vedvick, Thomas S.
;    APPLICANT: Carter, Darrick
;    TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;    TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
```

```
; FILE REFERENCE: 210121.471C14
; CURRENT APPLICATION NUMBER: US/10/025,380
; CURRENT FILING DATE: 2001-12-19
; NUMBER OF SEQ ID NOS: 1129
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 853
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-025-380-853


Query Match          2.3%;     Score 176.2; DB 14; Length 626;
Best Local Similarity  85.6%;    Pred. No. 2.3e-42;
Matches  196;  Conservative   0;  Mismatches   33;  Indels    0;  Gaps    0;

Qy    4147 TGCAGAGAAGGCAAGCTGGACTAGCGAGCGGCGCCCAGTTCTGGTCGAAGACCCAGGTTCT 4206
           | ||||||||||| |||   | |||| || ||||   ||||||||||| ||||||||||||
Db     622 TACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCT 563

Qy    4207 GGAGTGGATCAGCTACCAAGTGGAGAAGAACAAGTATGACGCCAGCTCCATCGACTTCTC 4266
           ||||| ||||||||| | ||||||| ||||||| |||  | | ||||| || |||||||||
Db     562 GGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCGCAAGCGCCATTGACTTCTC 503

Qy    4267 CCGCTGCAACATGGACGGAGCCACCCTCTGCAGCTGTGCGCTGGAGGAGCTGCGGCTAGT 4326
           |||||||  ||| | |  |||| |||  ||| | | ||| | || || |||||| || ||
Db     502 ACGATGTGACATGGATGGCGCCACCCTTGCCCTTGAGGAGCTGCGTCTGGT 443

Qy    4327 CTTTGGACCTCTGGGAGACCAGCTCCATGCCCAGCTTCGGGACCTCAGT 4375
           ||||| || |||||| |||  |||| |||||||||||||||||||| |||
Db     442 CTTTGGGCCTCTGGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACT 394


Search completed: February 13, 2004, 11:48:40
Job time : 2738.91 secs
```

CM nucleic - nucleic search, using sw model

Copyright (c) 1993 - 2004 Compugen Ltd.

GenCore version 5.1.6

Run on: February 13, 2004, 01:27:22 ; Search time 7.40341 Seconds
(without alignments)
10448.744 Million cell updates/sec

Title: US-08-978-217-14
Perfect score: 21
Sequence: 1 GTACCTCATGGCCCGGCTCAG 21

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 2449703 seqs, 1841816367 residues

Total number of hits satisfying chosen parameters: 4899406

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq2:*
14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
16: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
17: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
18: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

SUMMARIES

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

Result No.	Score	% Query Match	Length	DB	ID	Description
c 1	21	100.0	237	12	US-10-305-720-927	Sequence 927, App
c 2	21	100.0	451	10	US-09-998-598-32	Sequence 32, Appl
c 3	21	100.0	499	10	US-09-998-598-32	Sequence 2290, Ap
c 4	21	100.0	502	9	US-09-604-287A-2290	Sequence 282, App
c 5	21	100.0	502	10	US-09-339-338-282	Sequence 282, App
c 6	21	100.0	502	11	US-09-551-621-282	Sequence 282, App
c 7	21	100.0	502	13	US-10-124-805-282	Sequence 282, App
c 8	21	100.0	502	14	US-10-007-805-282	Sequence 282, App
c 9	21	100.0	502	15	US-10-076-622-282	Sequence 282, App
c 10	21	100.0	1907	15	US-10-097-340-74	Sequence 74, Appl
c 11	21	100.0	1915	10	US-09-964-824A-101	Sequence 101, App
c 12	21	100.0	1915	10	US-09-964-824A-563	Sequence 563, App
c 13	21	100.0	1915	10	US-09-880-107-3420	Sequence 3420, Ap
c 14	21	100.0	1915	10	US-09-967-768A-192	Sequence 192, App
c 15	21	100.0	1917	9	US-09-922-217-1105	Sequence 1105, Ap

c 16	21	100.0	1917	14	US-10-025-380-1105	Sequence 1105, Ap
c 17	21	100.0	1956	12	US-10-264-049-756	Sequence 756, App
c 18	21	100.0	1996	9	US-09-925-301-207	Sequence 207, App
c 19	21	90.5	2269	15	US-10-131-410-64	Sequence 64, Appl
c 20	19	90.5	275	15	US-10-060-036-3261	Sequence 3261, Ap
21	19	90.5	1435	12	US-10-292-798-1601	Sequence 1601, Ap
22	19	80.0	1435	13	US-10-017-161-1953	Sequence 1953, Ap
23	16.8		9025608	15	US-10-156-761-1	Sequence 1, Appli
c 24	16.4	78.1	619	12	US-10-291-172-388	Sequence 388, App
c 25	16.4	78.1	733	13	US-10-027-632-149050	Sequence 149050,
c 26	16.4	78.1	733	14	US-10-027-632-149050	Sequence 149050,
27	16.4	78.1	1851	15	US-10-156-761-5632	Sequence 5632, Ap
28	16.4	78.1	2094	13	US-10-027-632-109965	Sequence 109965,
29	16.4	78.1	2094	14	US-10-027-632-109965	Sequence 109965,
c 30	16.4	78.1	2212	15	US-10-919-497-25	Sequence 25, Appl
31	16.4	78.1	2450	12	US-10-388-934-599	Sequence 599, App
32	16.4	78.1	10322	10	US-09-764-868-1471	Sequence 1471, Ap
33	16.4	78.1	130427	15	US-10-175-523-87	Sequence 87, Appli
c 34	16.4	78.1	9025608	15	US-10-156-761-1	Sequence 1, Appli
35	16.2	77.1	366	15	US-10-187-267A-10	Sequence 10, Appl
36	16.2	77.1	402	12	US-10-242-535A-7139	Sequence 7139, Ap
37	16.2	77.1	470	12	US-10-242-535A-42404	Sequence 42404, A
c 38	16.2	77.1	624	15	US-10-156-76-7031	Sequence 7031, Ap
c 39	16.2	77.1	1639	13	US-10-247-671-46	Sequence 46, Appl
c 40	16.2	77.1	2266	12	US-10-388-263-201	Sequence 201, App
41	16.2	77.1	2939	14	US-10-044-090-350	Sequence 350, App
42	16.2	77.1	3121	12	US-10-439-249-6	Sequence 6, Appli
43	16.2	77.1	3121	13	US-09-866-034-6	Sequence 6, Appli
44	16.2	77.1	3121	13	US-10-210-951-65	Sequence 65, Appl
45	16.2	77.1	3121	13	US-10-211-884-65	Sequence 65, Appl

ALIGNMENTS

RESULT 1
US-10-305-720-927/c
; Sequence 927, Application US/10305720
; Publication No. US2004010136A1
; GENERAL INFORMATION:
; APPLICANT: Au-Young, Janice K.; Seilhamer, Jeffrey J.
; TITLE OF INVENTION: Composition for the Detection of Signaling Pathway Gene Expressi
; FILE REFERENCE: PA-0002-1 CON
; CURRENT APPLICATION NUMBER: US/10/305,720
; CURRENT FILING DATE: 2002-11-26
; PRIOR APPLICATION NUMBER: 09/016,434
; PRIOR FILING DATE: 1998-01-30
; NUMBER OF SEQ ID NOS: 1490
; SOFTWARE: PERL Program
; SEQ ID NO 927
; LENGTH: 237
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No. US2004010136A1 773734
US-10-305-720-927

Query Match   100.0%;   Score 21;   DB 12;   Length 237;
Best Local Similarity   100.0%;   Pred. No. 0.77;
Matches   21;   Conservative   0;   Mismatches   0;   Indels   0;   Gaps   0;

Qy   1 GTACCTCATGGCCCGGCTCAG 21
       ||||||||||||||||||||||
Db   55 GTACCTCATGGCCCGGCTCAG 35

RESULT 2
US-09-998-598-32/c
; Sequence 32, Application US/09998598
; Patent No. US2002015092A1
; GENERAL INFORMATION:
; APPLICANT: Stolk, John A.

```
;     APPLICANT:  Xu, Jiangchun
;     APPLICANT:  Chenault, Ruth A.
;     APPLICANT:  Meagher, Madelein Joy
;     TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;     TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER
;     FILE REFERENCE: 210121.561
;     CURRENT APPLICATION NUMBER: US/09/998,598
;     CURRENT FILING DATE: 2001-11-16
;     NUMBER OF SEQ ID NOS: 2606
;     SOFTWARE: Corixa Invention Disclosure Database
; SEQ ID NO 32
;     LENGTH: 451
;     TYPE: DNA
;     ORGANISM: Homo sapiens
US-09-998-598-32

Query Match             100.0%;  Score 21;  DB 10;  Length 451;
Best Local Similarity   100.0%;  Pred. No. 0.73;
Matches  21;  Conservative  0;  Mismatches  0;  Indels  0;  Gaps  0;

Qy    1 GTACCTCATGGCCCGGCTCAG 21
        |||||||||||||||||||||
Db  109 GTACCTCATGGCCCGGCTCAG 89

RESULT 3
US-09-998-598-2290
;  Sequence 2290, Application US/09998598
;  Patent No. US20020150922A1
;  GENERAL INFORMATION:
;     APPLICANT:  Stolk, John A.
;     APPLICANT:  Xu, Jiangchun
;     APPLICANT:  Chenault, Ruth A.
;     APPLICANT:  Meagher, Madelein Joy
;     TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;     TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER
;     FILE REFERENCE: 210121.561
;     CURRENT APPLICATION NUMBER: US/09/998,598
;     CURRENT FILING DATE: 2001-11-16
;     NUMBER OF SEQ ID NOS: 2606
;     SOFTWARE: Corixa Invention Disclosure Database
; SEQ ID NO 2290
;     LENGTH: 499
;     TYPE: DNA
;     ORGANISM: Homo sapiens
US-09-998-598-2290

Query Match             100.0%;  Score 21;  DB 10;  Length 499;
Best Local Similarity   100.0%;  Pred. No. 0.72;
Matches  21;  Conservative  0;  Mismatches  0;  Indels  0;  Gaps  0;

Qy    1 GTACCTCATGGCCCGGCTCAG 21
        |||||||||||||||||||||
Db  156 GTACCTCATGGCCCGGCTCAG 176

RESULT 4
US-09-604-287A-282/c
;  Sequence 282, Application US/09604287A
;  Patent No. US20020064872A1
;  GENERAL INFORMATION:
;     APPLICANT:  Jiang, Yuqiu
;     APPLICANT:  Dillon, Davin C.
;     APPLICANT:  Mitcham, Jennifer L.
;     APPLICANT:  Xu, Jiangchun
;     APPLICANT:  Harlocker, Susan L.
;     APPLICANT:  Hepler, William T.
;     TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;     TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
;     FILE REFERENCE: 210121.470C7
;     CURRENT APPLICATION NUMBER: US/09/604,287A
;     CURRENT FILING DATE: 2000-06-22
;     NUMBER OF SEQ ID NOS: 489
;     SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;     LENGTH: 502
;     TYPE: DNA
;     ORGANISM: Homo sapiens
US-09-604-287A-282

Query Match             100.0%;  Score 21;  DB 9;  Length 502;
Best Local Similarity   100.0%;  Pred. No. 0.72;
Matches  21;  Conservative  0;  Mismatches  0;  Indels  0;  Gaps  0;

Qy    1 GTACCTCATGGCCCGGCTCAG 21
        |||||||||||||||||||||
Db  458 GTACCTCATGGCCCGGCTCAG 438

RESULT 5
US-09-339-338-282/c
;  Sequence 282, Application US/09339338A
;  Patent No. US20020102602A1
;  GENERAL INFORMATION:
;     APPLICANT:  Yuqiu, Jiang
;     APPLICANT:  Dillon, Davin C.
;     APPLICANT:  Mitcham, Jennifer L.
;     APPLICANT:  Xu, Jiangchun
;     TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;     TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;     FILE REFERENCE: 210121.470C2
;     CURRENT APPLICATION NUMBER: US/09/339,338A
;     CURRENT FILING DATE: 1999-06-23
;     NUMBER OF SEQ ID NOS: 315
;     SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;     LENGTH: 502
;     TYPE: DNA
;     ORGANISM: Homo sapiens
US-09-339-338-282

Query Match             100.0%;  Score 21;  DB 10;  Length 502;
Best Local Similarity   100.0%;  Pred. No. 0.72;
Matches  21;  Conservative  0;  Mismatches  0;  Indels  0;  Gaps  0;

Qy    1 GTACCTCATGGCCCGGCTCAG 21
        |||||||||||||||||||||
Db  458 GTACCTCATGGCCCGGCTCAG 438

RESULT 6
US-09-551-621-282/c
;  Sequence 282, Application US/09551621
;  Publication No. US2003010436A1
;  GENERAL INFORMATION:
;     APPLICANT:  Yuqiu, Jiang
;     APPLICANT:  Dillon, Davin C.
;     APPLICANT:  Mitcham, Jennifer L.
;     APPLICANT:  Xu, Jiangchun
;     APPLICANT:  Harlocker, Susan L.
;     TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;     TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;     FILE REFERENCE: 210121.470C5
;     CURRENT APPLICATION NUMBER: US/09/551,621
;     CURRENT FILING DATE: 2000-04-17
;     NUMBER OF SEQ ID NOS: 479
;     SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;     LENGTH: 502
;     TYPE: DNA
;     ORGANISM: Homo sapiens
US-09-551-621-282

Query Match             100.0%;  Score 21;  DB 11;  Length 502;
Best Local Similarity   100.0%;  Pred. No. 0.72;
Matches  21;  Conservative  0;  Mismatches  0;  Indels  0;  Gaps  0;
```

```
Qy    1 GTACCTCATGGCCCGGCTCAG 21
        ||||||||||||||||||||||
Db  458 GTACCTCATGGCCCGGCTCAG 438
```

RESULT 7
US-10-124-805-282/c
; Sequence 282, Application US/10124805
; Publication No. US20030166022A1
; GENERAL INFORMATION:
;   APPLICANT: Houghton, Raymond L.
;   APPLICANT: Sleath, Paul R.
;   APPLICANT: Persing, David H.
;   TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
;   TITLE OF INVENTION: AND DIAGNOSIS OF BREAST CANCER
;   FILE REFERENCE: 210121.470C12
;   CURRENT APPLICATION NUMBER: US/10/124,805
;   CURRENT FILING DATE: 2002-04-15
;   NUMBER OF SEQ ID NOS: 627
;   SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-124-805-282

```
Query Match             100.0%;  Score 21;  DB 13;  Length 502;
Best Local Similarity   100.0%;  Pred. No. 0.72;
Matches    21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    1 GTACCTCATGGCCCGGCTCAG 21
        ||||||||||||||||||||||
Db  458 GTACCTCATGGCCCGGCTCAG 438
```

RESULT 8
US-10-007-805-282/c
; Sequence 282, Application US/10007805
; Publication No. US20020150581A1
; GENERAL INFORMATION:
;   APPLICANT: Jiang, Yuqiu
;   APPLICANT: Dillon, Davin C.
;   APPLICANT: Mitcham, Jennifer L.
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Harlocker, Susan L.
;   APPLICANT: Hepler, William T.
;   APPLICANT: Henderson, Robert A.
;   APPLICANT: Fanger, Gary R.
;   APPLICANT: Vedvick, Thomas S.
;   APPLICANT: McNeill, Patricia D.
;   APPLICANT: Durham, Margarita
;   TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
;   TITLE OF INVENTION: AND DIAGNOSIS OF BREAST CANCER
;   FILE REFERENCE: 210121.470C10
;   CURRENT APPLICATION NUMBER: US/10/007,805
;   CURRENT FILING DATE: 2001-12-07
;   NUMBER OF SEQ ID NOS: 593
;   SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-007-805-282

```
Query Match             100.0%;  Score 21;  DB 14;  Length 502;
Best Local Similarity   100.0%;  Pred. No. 0.72;
Matches    21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    1 GTACCTCATGGCCCGGCTCAG 21
        ||||||||||||||||||||||
Db  458 GTACCTCATGGCCCGGCTCAG 438
```

RESULT 9
US-10-076-622-282/c
; Sequence 282, Application US/10076622
; Publication No. US20030023036A1
; GENERAL INFORMATION:
;   APPLICANT: Houghton, Raymond L.
;   APPLICANT: Sleath, Paul R.
;   APPLICANT: Persing, David H.
;   TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
;   TITLE OF INVENTION: AND DIAGNOSIS OF BREAST CANCER
;   FILE REFERENCE: 210121.470C11
;   CURRENT APPLICATION NUMBER: US/10/076,622
;   CURRENT FILING DATE: 2002-02-13
;   NUMBER OF SEQ ID NOS: 627
;   SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-076-622-282

```
Query Match             100.0%;  Score 21;  DB 15;  Length 502;
Best Local Similarity   100.0%;  Pred. No. 0.72;
Matches    21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    1 GTACCTCATGGCCCGGCTCAG 21
        ||||||||||||||||||||||
Db  458 GTACCTCATGGCCCGGCTCAG 438
```

RESULT 10
US-10-097-340-74/c
; Sequence 74, Application US/10097340
; Publication No. US20030087250A1
; GENERAL INFORMATION:
;   APPLICANT: John MONAHAN
;   APPLICANT: Manjula GANNAVARAPU
;   APPLICANT: Sebastian HOERSCH
;   APPLICANT: Shubhangi KAMATKAR
;   APPLICANT: Steve G. KOVATS
;   APPLICANT: Rachel E. MEYERS
;   APPLICANT: Michael MORRISEY
;   APPLICANT: Peter OLANDT
;   APPLICANT: Ami SEN
;   APPLICANT: Peter VEIBY
;   APPLICANT: Gordon B. MILLS
;   APPLICANT: Robert C. BAST, Jr.
;   APPLICANT: Karen LU
;   APPLICANT: Rosemarie SCHMANDT
;   APPLICANT: Xumei ZHAO
;   APPLICANT: Karen GLATT
;   TITLE OF INVENTION: Nucleic Acid Molecules and Proteins For The Identification,
;   TITLE OF INVENTION: Assessment, Prevention, and Therapy of Ovarian Cancer
;   FILE REFERENCE: MRI-030
;   CURRENT APPLICATION NUMBER: US/10/097,340
;   CURRENT FILING DATE: 2002-03-14
;   PRIOR APPLICATION NUMBER: 60/276,025
;   PRIOR FILING DATE: 2001-03-14
;   PRIOR APPLICATION NUMBER: 60/325,149
;   PRIOR FILING DATE: 2001-09-26
;   PRIOR APPLICATION NUMBER: 60/276,026
;   PRIOR FILING DATE: 2001-03-14
;   PRIOR APPLICATION NUMBER: 60/324,967
;   PRIOR FILING DATE: 2001/09/26
;   PRIOR APPLICATION NUMBER: 60/311,732
;   PRIOR FILING DATE: 2001-08-10
;   PRIOR APPLICATION NUMBER: 60/325,102
;   PRIOR FILING DATE: 2001-09-26
;   PRIOR APPLICATION NUMBER: 60/323,580
;   PRIOR FILING DATE: 2001-09-19
;   NUMBER OF SEQ ID NOS: 363
;   SOFTWARE: FastSEQ for Windows Version 4.0

```
; SEQ ID NO 74
;   LENGTH: 1907
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-097-340-74

Query Match             100.0%;  Score 21;  DB 15;  Length 1907;
Best Local Similarity   100.0%;  Pred. No. 0.65;
Matches   21;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db       1100 GTACCTCATGGCCCGGCTCAG 1080

RESULT 11
US-09-964-824A-101/c
; Sequence 101, Application US/09964824A
; Patent No. US2002010253lAl
; GENERAL INFORMATION:
;   APPLICANT: Horrigan, Stephen
;   TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;   TITLE OF INVENTION: Sets
;   FILE REFERENCE: 689290-73
;   CURRENT APPLICATION NUMBER: US/09/964,824A
;   CURRENT FILING DATE:  2001-09-27
;   PRIOR APPLICATION NUMBER: US/60/236,032
;   PRIOR FILING DATE:  2000-09-28
;   PRIOR APPLICATION NUMBER: US/60/236,033
;   PRIOR FILING DATE:  2000-09-28
;   PRIOR APPLICATION NUMBER: US/60/236,028
;   PRIOR FILING DATE:  2000-09-28
;   NUMBER OF SEQ ID NOS: 583
;   SOFTWARE: PatentIn version 3.0
;   SEQ ID NO 101
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-964-824A-101

Query Match             100.0%;  Score 21;  DB 10;  Length 1915;
Best Local Similarity   100.0%;  Pred. No. 0.65;
Matches   21;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db       1124 GTACCTCATGGCCCGGCTCAG 1104

RESULT 12
US-09-964-824A-563/c
; Sequence 563, Application US/09964824A
; Patent No. US2002010253lAl
; GENERAL INFORMATION:
;   APPLICANT: Horrigan, Stephen
;   TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;   TITLE OF INVENTION: Sets
;   FILE REFERENCE: 689290-73
;   CURRENT APPLICATION NUMBER: US/09/964,824A
;   CURRENT FILING DATE:  2001-09-27
;   PRIOR APPLICATION NUMBER: US/60/236,032
;   PRIOR FILING DATE:  2000-09-28
;   PRIOR APPLICATION NUMBER: US/60/236,033
;   PRIOR FILING DATE:  2000-09-28
;   PRIOR APPLICATION NUMBER: US/60/236,028
;   PRIOR FILING DATE:  2000-09-28
;   NUMBER OF SEQ ID NOS: 583
;   SOFTWARE: PatentIn version 3.0
;   SEQ ID NO 563
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-964-824A-563
```

```
Query Match             100.0%;  Score 21;  DB 10;  Length 1915;
Best Local Similarity   100.0%;  Pred. No. 0.65;
Matches   21;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db       1124 GTACCTCATGGCCCGGCTCAG 1104

RESULT 13
US-09-880-107-3420/c
; Sequence 3420, Application US/09880107
; Patent No. US20020142981A1
; GENERAL INFORMATION:
;   APPLICANT: Horne, Darci T.
;   APPLICANT: Vockley, Joseph G.
;   APPLICANT: Scherf, Uwe
;   APPLICANT: Gene Logic, Inc.
;   TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
;   FILE REFERENCE: 4492l-5028-WO
;   CURRENT APPLICATION NUMBER: US/09/880,107
;   CURRENT FILING DATE:  2001-06-14
;   PRIOR APPLICATION NUMBER: US 60/211,379
;   PRIOR FILING DATE:  2000-06-14
;   PRIOR APPLICATION NUMBER: US 60/237,054
;   PRIOR FILING DATE:  2000-10-02
;   NUMBER OF SEQ ID NOS: 3950
;   SOFTWARE: PatentIn Ver. 2.1
;   SEQ ID NO 3420
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   OTHER INFORMATION: Genbank Accession No. US20020142981A1 U73843
US-09-880-107-3420

Query Match             100.0%;  Score 21;  DB 10;  Length 1915;
Best Local Similarity   100.0%;  Pred. No. 0.65;
Matches   21;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db       1124 GTACCTCATGGCCCGGCTCAG 1104

RESULT 14
US-09-967-768A-192/c
; Sequence 192, Application US/09967768A
; Patent No. US20020150877A1
; GENERAL INFORMATION:
;   APPLICANT: Augustus, Meena
;   TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signat
;   TITLE OF INVENTION: Sets
;   FILE REFERENCE: 689290-72
;   CURRENT APPLICATION NUMBER: US/09/967,768A
;   CURRENT FILING DATE:  2001-09-28
;   PRIOR APPLICATION NUMBER: US/60/236,109
;   PRIOR FILING DATE:  2000-09-28
;   PRIOR APPLICATION NUMBER: US/60/236,034
;   PRIOR FILING DATE:  2000-09-28
;   PRIOR APPLICATION NUMBER: US/60/236,111
;   PRIOR FILING DATE:  2000-09-28
;   NUMBER OF SEQ ID NOS: 325
;   SOFTWARE: PatentIn version 3.0
;   SEQ ID NO 192
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-967-768A-192

Query Match             100.0%;  Score 21;  DB 10;  Length 1915;
Best Local Similarity   100.0%;  Pred. No. 0.65;
```

Matches   21;   Conservative   0;   Mismatches   0;   Indels   0;   Gaps   0;

Qy   1 GTACCTCATGGCCGGCTCAG 21
           |||||||||||||||||||||
Db   1124 GTACCTCATGGCCGGCTCAG 1104

RESULT 15
US-09-922-217-1105/c
; Sequence 1105, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole Lynn
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C13
; CURRENT APPLICATION NUMBER: US/09/922,217
; CURRENT FILING DATE: 2001-08-03
; NUMBER OF SEQ ID NOS: 1124
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
; LENGTH: 1917
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-922-217-1105

Query Match   100.0%;   Score 21;   DB 9;   Length 1917;
Best Local Similarity   100.0%;   Pred. No. 0.65;
Matches   21;   Conservative   0;   Mismatches   0;   Indels   0;   Gaps   0;

Qy   1 GTACCTCATGGCCGGCTCAG 21
           |||||||||||||||||||||
Db   1126 GTACCTCATGGCCGGCTCAG 1106

Search completed: February 13, 2004, 11:48:34
Job time : 16.4034 secs

```
                GenCore version 5.1.6
         Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on:        February 13, 2004, 01:27:22 ; Search time 7.40341 Seconds
                                             (without alignments)
                                             10448.744 Million cell updates/sec

Title:         US-08-978-217-13
Perfect score: 21
Sequence:      1 CCGGGACATCCTCATCCACCC 21

Scoring table: IDENTITY_NUC
               Gapop 10.0 , Gapext 1.0

Searched:      2449703 segs, 1841816367 residues

Total number of hits satisfying chosen parameters:    4899406

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

Database :     Published Applications NA:*
           1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
           2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
           3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
           4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
           5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
           6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
           7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
           8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
           9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
          10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
          11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
          12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
          13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq2:*
          14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
          15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
          16: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
          17: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
          18: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

                          SUMMARIES
```

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

Result No.		Score	% Match	Query Match	Length	DB	ID	Description
1		21	100.0	21	275	15	US-10-060-036-3261	Sequence 3261, Ap
2	c	21	100.0	21	499	15	US-09-998-598-2290	Sequence 2290, Ap
3		21	100.0	21	502	9	US-09-604-287A-282	Sequence 282, App
4		21	100.0	21	502	10	US-09-339-338-282	Sequence 282, App
5		21	100.0	21	502	11	US-09-551-621-282	Sequence 282, App
6		21	100.0	21	502	13	US-10-124-805-282	Sequence 282, App
7		21	100.0	21	502	14	US-10-007-805-282	Sequence 282, App
8		21	100.0	21	502	15	US-10-076-622-282	Sequence 282, App
9	c	21	100.0	21	1435	12	US-10-292-798-1601	Sequence 1601, Ap
10	c	21	100.0	21	1435	13	US-10-017-161-1953	Sequence 1953, Ap
11		21	100.0	21	1907	15	US-10-097-340-74	Sequence 74, Appl
12		21	100.0	21	1915	10	US-09-964-824A-101	Sequence 101, Appl
13		21	100.0	21	1915	10	US-09-964-824A-563	Sequence 563, App
14		21	100.0	21	1915	10	US-09-880-107-3420	Sequence 3420, Ap
15		21	100.0	21	1915	10	US-09-967-768A-192	Sequence 192, App
16		16	21	100.0	9	1917	US-09-922-217-1105	Sequence 1105, Ap
17		17	21	100.0	14	1917	US-10-025-380-1105	Sequence 1105, Ap
18		18	21	100.0	12	1956	US-10-264-049-756	Sequence 756, App
19		19	21	100.0	9	1996	US-09-925-301-207	Sequence 207, App
20		20	21	100.0	12	2269	US-10-131-410-64	Sequence 64, Appl
21		21	17.8	9	250	US-09-864-761-21324	Sequence 21324, A
22		22	17.8	84.8	472	US-09-864-761-4580	Sequence 4580, Ap
23		23	16.8	84.8	471	US-09-918-995-23822	Sequence 23822, A
24		24	16.8	80.0	792	US-10-027-632-138998	Sequence 138998,
25		25	16.8	80.0	792	US-10-027-632-138999	Sequence 138999,
26		26	16.8	80.0	792	US-10-027-632-138998	Sequence 138998,
27		27	16.8	80.0	792	US-10-027-632-138999	Sequence 138999,
28	c	28	16.8	80.0	825	US-10-369-493-43197	Sequence 43197, A
29		29	16.8	80.0	1626	US-10-156-761-4976	Sequence 4976, Ap
30		30	16.8	80.0	2539	US-10-198-846-13456	Sequence 13456, A
31	c	31	16.8	80.0	3049	US-10-120-988-186	Sequence 186, App
32	c	32	16.8	80.0	3083	US-10-138-588-21	Sequence 21, Appl
33		33	16.8	80.0	9025608	US-10-156-761-1	Sequence 1, Appli
34		34	16.4	78.1	25	US-10-161-493-166	Sequence 166, App
35	c	35	16.4	78.1	344	US-10-918-995-23054	Sequence 23054, A
36		36	16.4	78.1	375	US-10-156-761-3999	Sequence 3999, Ap
37	c	37	16.4	78.1	1322	US-10-264-237-1190	Sequence 1190, Ap
38		38	16.4	78.1	2427	US-10-369-493-33512	Sequence 33512, A
39	c	39	16.4	78.1	3622	US-10-159-563-347	Sequence 347, App
40		40	16.4	78.1	3653	US-10-161-493-17	Sequence 17, Appl
41	c	41	16.4	78.1	3657	US-10-062-674-1718	Sequence 1718, Ap
42	c	42	16.2	77.1	165	US-09-158-722-1	Sequence 1, Appli
43	c	43	16.2	77.1	279	US-10-242-535A-9649	Sequence 9649, Ap
44	c	44	16.2	77.1	342	US-10-066-543-2502	Sequence 2502, Ap
45		45	16.2	77.1	361	US-09-735-705-303	Sequence 303, App

```
                              ALIGNMENTS

RESULT 1
US-10-060-036-3261
; Sequence 3261, Application US/10060036
; Publication No. US2003007314A1
; GENERAL INFORMATION:
;  APPLICANT: Benson, Darin R.
;  APPLICANT: Kalos, Michael D.
;  APPLICANT: Lodes, Michael J.
;  APPLICANT: Persing, David H.
;  APPLICANT: Hepler, William T.
;  APPLICANT: Jiang, Yuqiu
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
;  TITLE OF INVENTION:  AND DIAGNOSIS OF PANCREATIC CANCER
;  FILE REFERENCE: 210121.566
;  CURRENT APPLICATION NUMBER: US/10/060,036
;  CURRENT FILING DATE: 2002-01-30
;  NUMBER OF SEQ ID NOS: 4560
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 3261
;  LENGTH: 275
;  TYPE: DNA
;  ORGANISM: Homo sapiens
US-10-060-036-3261

  Query Match           100.0%;  Score 21;  DB 15;  Length 275;
  Best Local Similarity 100.0%;  Pred. No. 2.5;
  Matches    21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      1 CCGGGACATCCTCATCCACCC 21
          |||||||||||||||||||||
Db    109 CCGGGACATCCTCATCCACCC 129

RESULT 2
US-09-998-598-2290/c
; Sequence 2290, Application US/09998598
; Patent No. US2002015092A1
; GENERAL INFORMATION:
```

```
;       APPLICANT: Stolk, John A.
;       APPLICANT: Xu, Jiangchun
;       APPLICANT: Chenault, Ruth A.
;       APPLICANT: Meagher, Madelein Joy
;       TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;       TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER
;       FILE REFERENCE: 210121.561
;       CURRENT APPLICATION NUMBER: US/09/998,598
;       CURRENT FILING DATE: 2001-11-16
;       NUMBER OF SEQ ID NOS: 2606
;       SOFTWARE: Corixa Invention Disclosure Database
;       SEQ ID NO 2290
;         LENGTH: 499
;         TYPE: DNA
;         ORGANISM: Homo sapiens
US-09-998-598-2290

  Query Match             100.0%;  Score 21;  DB 10;  Length 499;
  Best Local Similarity   100.0%;  Pred. No. 2.4;
  Matches   21;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        324 CCGGGACATCCTCATCCACCC 304

RESULT 3
US-09-604-287A-282
; Sequence 282, Application US/09604287A
; Patent No. US2002006487A1
; GENERAL INFORMATION:
;       APPLICANT: Jiang, Yuqiu
;       APPLICANT: Dillon, Davin C.
;       APPLICANT: Mitcham, Jennifer L.
;       APPLICANT: Xu, Jiangchun
;       APPLICANT: Harlocker, Susan L.
;       APPLICANT: Hepler, William T.
;       TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;       TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
;       FILE REFERENCE: 210121.470C7
;       CURRENT APPLICATION NUMBER: US/09/604,287A
;       CURRENT FILING DATE: 2000-06-22
;       NUMBER OF SEQ ID NOS: 489
;       SOFTWARE: FastSEQ for Windows Version 3.0
;       SEQ ID NO 282
;         LENGTH: 502
;         TYPE: DNA
;         ORGANISM: Homo sapiens
US-09-604-287A-282

  Query Match             100.0%;  Score 21;  DB 9;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 2.4;
  Matches   21;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        290 CCGGGACATCCTCATCCACCC 310

RESULT 4
US-09-339-338-282
; Sequence 282, Application US/09339338A
; Patent No. US2002010262A1
; GENERAL INFORMATION:
;       APPLICANT: Yuqiu, Jiang
;       APPLICANT: Dillon, Davin C.
;       APPLICANT: Mitcham, Jennifer L.
;       APPLICANT: Xu, Jiangchun
;       TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;       TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;       FILE REFERENCE: 210121.470C2
;       CURRENT APPLICATION NUMBER: US/09/339,338A
;       CURRENT FILING DATE: 1999-06-23
;       NUMBER OF SEQ ID NOS: 315
;       SOFTWARE: FastSEQ for Windows Version 3.0
;       SEQ ID NO 282
;         LENGTH: 502
;         TYPE: DNA
;         ORGANISM: Homo sapiens
US-09-339-338-282

  Query Match             100.0%;  Score 21;  DB 10;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 2.4;
  Matches   21;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        290 CCGGGACATCCTCATCCACCC 310

RESULT 5
US-09-551-621-282
; Sequence 282, Application US/0955 1621
; Publication No. US2003010436A1
; GENERAL INFORMATION:
;       APPLICANT: Yuqui, Jiang
;       APPLICANT: Dillon, Davin C.
;       APPLICANT: Mitcham, Jennifer L.
;       APPLICANT: Xu, Jiangchun
;       APPLICANT: Harlocker, Susan L.
;       TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;       TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;       FILE REFERENCE: 210121.470C5
;       CURRENT APPLICATION NUMBER: US/09/551,621
;       CURRENT FILING DATE: 2000-04-17
;       NUMBER OF SEQ ID NOS: 479
;       SOFTWARE: FastSEQ for Windows Version 3.0
;       SEQ ID NO 282
;         LENGTH: 502
;         TYPE: DNA
;         ORGANISM: Homo sapiens
US-09-551-621-282

  Query Match             100.0%;  Score 21;  DB 11;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 2.4;
  Matches   21;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        290 CCGGGACATCCTCATCCACCC 310

RESULT 6
US-10-124-805-282
; Sequence 282, Application US/10124805
; Publication No. US2003016022A1
; GENERAL INFORMATION:
;       APPLICANT: Houghton, Raymond L.
;       APPLICANT: Sleath, Paul R.
;       APPLICANT: Persing, David H.
;       TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
;       TITLE OF INVENTION: AND DIAGNOSIS OF BREAST CANCER
;       FILE REFERENCE: 210121.470C12
;       CURRENT APPLICATION NUMBER: US/10/124,805
;       CURRENT FILING DATE: 2002-04-15
;       NUMBER OF SEQ ID NOS: 627
;       SOFTWARE: FastSEQ for Windows Version 4.0
;       SEQ ID NO 282
;         LENGTH: 502
;         TYPE: DNA
;         ORGANISM: Homo sapiens
US-10-124-805-282

  Query Match             100.0%;  Score 21;  DB 13;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 2.4;
  Matches   21;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;
```

Qy   1 CCGGGACATCCTCATCCACCC 21
        |||||||||||||||||||||
Db 290 CCGGGACATCCTCATCCACCC 310

RESULT 7
US-10-007-805-282
; Sequence 282, Application US/10007805
; Publication No. US20020150581A1
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; APPLICANT: Henderson, Robert A.
; APPLICANT: Fanger, Gary R.
; APPLICANT: Vedvick, Thomas S.
; APPLICANT: McNeill, Patricia D.
; APPLICANT: Durham, Margarita
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
; TITLE OF INVENTION: AND DIAGNOSIS OF BREAST CANCER
; FILE REFERENCE: 210121.470C10
; CURRENT APPLICATION NUMBER: US/10/007,805
; CURRENT FILING DATE: 2001-12-07
; NUMBER OF SEQ ID NOS: 593
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-007-805-282

Query Match   100.0%; Score 21; DB 14; Length 502;
Best Local Similarity 100.0%; Pred. No. 2.4;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy   1 CCGGGACATCCTCATCCACCC 21
        |||||||||||||||||||||
Db 290 CCGGGACATCCTCATCCACCC 310

RESULT 8
US-10-076-622-282
; Sequence 282, Application US/10076622
; Publication No. US20030023036A1
; GENERAL INFORMATION:
; APPLICANT: Houghton, Raymond L.
; APPLICANT: Sleath, Paul R.
; APPLICANT: Persing, David H.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
; TITLE OF INVENTION: AND DIAGNOSIS OF BREAST CANCER
; FILE REFERENCE: 210121.470C11
; CURRENT APPLICATION NUMBER: US/10/076,622
; CURRENT FILING DATE: 2002-02-13
; NUMBER OF SEQ ID NOS: 627
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-076-622-282

Query Match   100.0%; Score 21; DB 15; Length 502;
Best Local Similarity 100.0%; Pred. No. 2.4;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy   1 CCGGGACATCCTCATCCACCC 21
        |||||||||||||||||||||
Db 290 CCGGGACATCCTCATCCACCC 310

RESULT 9
US-10-292-798-1601/c
; Sequence 1601, Application US/10292798
; Publication No. US20030235833A1
; GENERAL INFORMATION:
; APPLICANT: SUWA, MAKIKO
; APPLICANT: ASAI, KIYOSHI
; APPLICANT: AKIYAMA, YUTAKA
; APPLICANT: ABURATANI, HIROYUKI
; TITLE OF INVENTION: GUANOSINE TRIPHOSPHATE-BINDING PROTEIN COUPLED RECEPTORS
; FILE REFERENCE: 084335/166
; CURRENT APPLICATION NUMBER: US/10/292,798
; CURRENT FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: 10/017,161
; PRIOR FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: JP 2001-246789
; PRIOR FILING DATE: 2001-06-18
; NUMBER OF SEQ ID NOS: 2070
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1601
; LENGTH: 1435
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; LOCATION: source
; FEATURE:
; LOCATION: (1)..(1435)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (201)..(1235)
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (1040)..(1139)
; OTHER INFORMATION: a, t, c, g, unknown or other
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (1145)..(1145)
; OTHER INFORMATION: a, t, c, g, unknown or other
US-10-292-798-1601

Query Match   100.0%; Score 21; DB 12; Length 1435;
Best Local Similarity 100.0%; Pred. No. 2.4;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy   1 CCGGGACATCCTCATCCACCC 21
        |||||||||||||||||||||
Db 335 CCGGGACATCCTCATCCACCC 315

RESULT 10
US-10-017-161-1953/c
; Sequence 1953, Application US/10017161
; Publication No. US20030143668A1
; GENERAL INFORMATION:
; APPLICANT: SUWA, MAKIKO
; APPLICANT: ASAI, KIYOSHI
; APPLICANT: AKIYAMA, YUTAKA
; APPLICANT: ABURATANI, HIROYUKI
; TITLE OF INVENTION: NOVEL G PROTEIN-COUPLED RECEPTORS
; FILE REFERENCE: 084335/0152
; CURRENT APPLICATION NUMBER: US/10/017,161
; CURRENT FILING DATE: 2002-12-18
; PRIOR APPLICATION NUMBER: JP 2001/246789
; PRIOR FILING DATE: 2001-06-18
; NUMBER OF SEQ ID NOS: 2430
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1953
; LENGTH: 1435
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: source

```
;      LOCATION: (1)..(1435)
;      FEATURE:
;      NAME/KEY: CDS
;      LOCATION: (201)..(1235)
;      FEATURE:
;      NAME/KEY: modified_base
;      LOCATION: (1040)..(1139)
;      OTHER INFORMATION: a, t, c, g, unknown or other
;      FEATURE:
;      NAME/KEY: modified_base
;      LOCATION: (1145)
;      OTHER INFORMATION: a, t, c, g, unknown or other
US-10-017-161-1953

Query Match            100.0%;  Score 21;  DB 13;  Length 1435;
Best Local Similarity   100.0%;  Pred. No. 2.4;
Matches   21;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy        1 CCGGGACATCCTCATCCACCC 21
            |||||||||||||||||||||
Db      335 CCGGGACATCCTCATCCACCC 315


RESULT 11
US-10-097-340-74
; Sequence 74, Application US/10097340
; Publication No. US2003008725OA1
; GENERAL INFORMATION:
; APPLICANT: John MONAHAN
; APPLICANT: Manjula GANNAVARAPU
; APPLICANT: Sebastian HOERSCH
; APPLICANT: Shubhangi KAMATKAR
; APPLICANT: Steve G. KOVATS
; APPLICANT: Rachel E. MEYERS
; APPLICANT: Michael MORRISEY
; APPLICANT: Peter OLANDT
; APPLICANT: Ami SEN
; APPLICANT: Peter VEIBY
; APPLICANT: Gordon B. MILLS
; APPLICANT: Robert C. BAST, Jr.
; APPLICANT: Karen LU
; APPLICANT: Rosemarie SCHMANDT
; APPLICANT: Xumei ZHAO
; APPLICANT: Karen GLATT
; TITLE OF INVENTION: Nucleic Acid Molecules and Proteins For The Identification,
; TITLE OF INVENTION: Assessment, Prevention, and Therapy of Ovarian Cancer
; FILE REFERENCE: MRI-030
; CURRENT APPLICATION NUMBER: US/10/097,340
; CURRENT FILING DATE:  2002-03-14
; PRIOR APPLICATION NUMBER: 60/276,025
; PRIOR FILING DATE:  2001-03-14
; PRIOR APPLICATION NUMBER: 60/325,149
; PRIOR FILING DATE:  2001-09-26
; PRIOR APPLICATION NUMBER: 60/276,026
; PRIOR FILING DATE:  2001-03-14
; PRIOR APPLICATION NUMBER: 60/324,967
; PRIOR FILING DATE:  2001/09/26
; PRIOR APPLICATION NUMBER: 60/311,732
; PRIOR FILING DATE:  2001-08-10
; PRIOR APPLICATION NUMBER: 60/325,102
; PRIOR FILING DATE:  2001-09-26
; PRIOR APPLICATION NUMBER: 60/323,580
; PRIOR FILING DATE:  2001-09-19
; SOFTWARE: FastSEQ for Windows Version 4.0
; NUMBER OF SEQ ID NOS: 363
SEQ ID NO 74
;      LENGTH: 1907
;      TYPE: DNA
;      ORGANISM: Homo sapiens
US-10-097-340-74

Query Match            100.0%;  Score 21;  DB 15;  Length 1907;
Best Local Similarity   100.0%;  Pred. No. 2.3;
```

```
Matches   21;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy        1 CCGGGACATCCTCATCCACCC 21
            |||||||||||||||||||||
Db      932 CCGGGACATCCTCATCCACCC 952


RESULT 12
US-09-964-824A-101
; Sequence 101, Application US/09964824A
; Patent No. US2002010253LA1
; GENERAL INFORMATION:
; APPLICANT: Horrigan, Stephen
; TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signat
; TITLE OF INVENTION: Sets
; FILE REFERENCE: 689290-73
; CURRENT APPLICATION NUMBER: US/09/964,824A
; CURRENT FILING DATE:  2001-09-27
; PRIOR APPLICATION NUMBER: US/60/236,033
; PRIOR FILING DATE:  2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,032
; PRIOR FILING DATE:  2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,028
; PRIOR FILING DATE:  2000-09-28
; NUMBER OF SEQ ID NOS: 583
; SOFTWARE: PatentIn version 3.0
SEQ ID NO 101
;      LENGTH: 1915
;      TYPE: DNA
;      ORGANISM: Homo sapiens
US-09-964-824A-101

Query Match            100.0%;  Score 21;  DB 10;  Length 1915;
Best Local Similarity   100.0%;  Pred. No. 2.3;
Matches   21;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy        1 CCGGGACATCCTCATCCACCC 21
            |||||||||||||||||||||
Db      956 CCGGGACATCCTCATCCACCC 976


RESULT 13
US-09-964-824A-563
; Sequence 563, Application US/09964824A
; Patent No. US2002010253LA1
; GENERAL INFORMATION:
; APPLICANT: Horrigan, Stephen
; TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signat
; TITLE OF INVENTION: Sets
; FILE REFERENCE: 689290-73
; CURRENT APPLICATION NUMBER: US/09/964,824A
; CURRENT FILING DATE:  2001-09-27
; PRIOR APPLICATION NUMBER: US/60/236,033
; PRIOR FILING DATE:  2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,032
; PRIOR FILING DATE:  2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,028
; PRIOR FILING DATE:  2000-09-28
; NUMBER OF SEQ ID NOS: 583
; SOFTWARE: PatentIn version 3.0
SEQ ID NO 563
;      LENGTH: 1915
;      TYPE: DNA
;      ORGANISM: Homo sapiens
US-09-964-824A-563

Query Match            100.0%;  Score 21;  DB 10;  Length 1915;
Best Local Similarity   100.0%;  Pred. No. 2.3;
Matches   21;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy        1 CCGGGACATCCTCATCCACCC 21
            |||||||||||||||||||||
Db      956 CCGGGACATCCTCATCCACCC 976
```

Job time : 13.4034 secs

RESULT 14
US-09-880-107-3420
; Sequence 3420, Application US/09880107
; Patent No. US2002014298lAl
; GENERAL INFORMATION:
; APPLICANT: Horne, Darci T.
; APPLICANT: Vockley, Joseph G.
; APPLICANT: Scherf, Uwe
; APPLICANT: Gene Logic, Inc.
; TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
; FILE REFERENCE: 44921-5028-WO
; CURRENT APPLICATION NUMBER: US/09/880,107
; CURRENT FILING DATE: 2001-06-14
; PRIOR APPLICATION NUMBER: US 60/211,379
; PRIOR FILING DATE: 2000-06-14
; PRIOR APPLICATION NUMBER: US 60/237,054
; PRIOR FILING DATE: 2000-10-02
; NUMBER OF SEQ ID NOS: 3950
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3420
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Genbank Accession No. US2002014298lAl U73843
US-09-880-107-3420

Query Match   100.0%; Score 21; DB 10; Length 1915;
Best Local Similarity 100.0%; Pred. No. 2.3;
Matches   21; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

Qy   1 CCGGGACATCCTCATCCACCC 21
          |||||||||||||||||||||
Db   956 CCGGGACATCCTCATCCACCC 976

RESULT 15
US-09-967-768A-192
; Sequence 192, Application US/09967768A
; Patent No. US2002015087 7Al
; GENERAL INFORMATION:
; APPLICANT: Augustus, Meena
; TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
; TITLE OF INVENTION: Sets
; FILE REFERENCE: 689290-72
; CURRENT APPLICATION NUMBER: US/09/967,768A
; CURRENT FILING DATE: 2001-09-28
; PRIOR APPLICATION NUMBER: US/60/236,109
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,034
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,111
; PRIOR FILING DATE: 2000-09-28
; NUMBER OF SEQ ID NOS: 325
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 192
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-967-768A-192

Query Match   100.0%; Score 21; DB 10; Length 1915;
Best Local Similarity 100.0%; Pred. No. 2.3;
Matches   21; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

Qy   1 CCGGGACATCCTCATCCACCC 21
          |||||||||||||||||||||
Db   956 CCGGGACATCCTCATCCACCC 976

Search completed: February 13, 2004, 11:48:25

```
          GenCore version 5.1.6

    Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - nucleic search, using frame_plus_p2n model

Run on:    February 12, 2004, 21:34:51 ; Search time 25.2461 Seconds
                                  (without alignments)
                          2334.540 Million cell updates/sec

Title:        US-08-978-217-12
Perfect score: 84
Sequence:     1 KNSSGWKEEVLQSRN 16

Scoring table: BLOSUM62
           Xgapop  10.0 , Xgapext   0.5
           Ygapop  10.0 , Ygapext   0.5
           Fgapop   6.0 , Fgapext   7.0
           Delop    6.0 , Delext    7.0

Searched:     2449703 seqs, 181181367 residues

Total number of hits satisfying chosen parameters:     4899406

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

Command line parameters:
-MODEL=frame+_p2n.model -DEV=xlh
-Q=/cgn2.1/USPTO_spool/US08978217/runat_10022004_133827_20514/app_query.fasta_1.1500
-DB=Published Applications_NA -QFMT=fastap -SUFFIX=rnpb -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=200000000 -USER=US08978217 @CGN_1_1_690 @runat_10022004_133827_20514
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
-FGAPOP=6
Database :    Published Applications NA:*
       1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
       2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
       3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
       4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
       5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
       6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
       7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
       8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
       9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
      10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
      11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
      12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
      13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq2:*
      14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
      15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
      16: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
      17: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
      18: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*
```

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

                    SUMMARIES

```
Result        %     Query
No.   Score  Score  Match Length DB ID                      Description
----  -----  -----  ----- ------ -----                      -----------
```

Result No.	Score	% Score	Query Match	Length	DB ID		Description
1	84	100.0	237		US-10-305-720-927	12	Sequence 927, Appl
2	84	100.0	451		US-09-998-598-32	10	Sequence 32, Appl
3	84	100.0	499	c	US-09-998-598-2290	15	Sequence 2290, Ap
4	84	100.0	528		US-10-066-543-3233	15	Sequence 3233, Ap
5	84	100.0	620		US-10-060-036-2379	15	Sequence 2379, Ap
6	84	100.0	1907		US-10-097-340-74	15	Sequence 74, Appl
7	84	100.0	1915		US-09-964-824A-101	10	Sequence 101, App
8	84	100.0	1915		US-09-964-824A-563	10	Sequence 563, App
9	84	100.0	1915		US-09-880-107-3420	10	Sequence 3420, Ap
10	84	100.0	1915		US-09-967-768A-192	10	Sequence 192, APP
11	84	100.0	1917		US-09-922-217-1105	9	Sequence 1105, Ap
12	84	100.0	1917		US-10-025-380-1105	14	Sequence 1105, Ap
13	84	100.0	1956		US-10-264-049-756	12	Sequence 756, APP
14	84	100.0	1996		US-09-925-301-207	9	Sequence 207, APP
15	84	100.0	2269		US-10-131-410-64	12	Sequence 64, Appl
16	57	67.9	1681	c	US-09-986-480-40	11	Sequence 40, Appl
17	52	61.9	1601	c	US-10-062-674-1730	12	Sequence 1730, Ap
18	50	59.5	535	c	US-10-029-386-3052	13	Sequence 3052, Ap
19	50	59.5	11788	c	US-10-316-253-263	13	Sequence 263, App
20	49	58.3	807		US-10-027-632-167020	13	Sequence 167020,
21	49	58.3	807		US-10-027-632-167020	14	Sequence 167020,
22	48	57.1	174	c	US-09-933-797-678	10	Sequence 678, APP
23	47	56.0	402		US-09-918-995-33421	11	Sequence 33421, A
24	47	56.0	254366		US-09-822-871-3	11	Sequence 3, Appli
25	46.5	55.4	787		US-10-027-632-125191	13	Sequence 125191,
26	46.5	55.4	787		US-10-027-632-125191	14	Sequence 125191,
27	46	54.8	552		US-10-027-632-90917	13	Sequence 90917, A
28	46	54.8	552		US-10-027-632-90917	14	Sequence 90917, A
29	46	54.8	1571	c	US-09-938-842A-4493	12	Sequence 4493, Ap
30	46	54.8	1571	c	US-09-938-842A-4493	12	Sequence 4493, Ap
31	46	54.8	3060		US-09-938-842A-760	10	Sequence 760, App
32	46	54.8	3060		US-09-938-842A-760	12	Sequence 760, App
33	46	54.8	3096	c	US-10-027-632-112161	13	Sequence 112161,
34	46	54.8	3096		US-10-027-632-112162	13	Sequence 112162,
35	46	54.8	3096	c	US-10-027-632-113958	13	Sequence 113958,
36	46	54.8	3096		US-10-027-632-113959	13	Sequence 113959,
37	46	54.8	3096		US-10-027-632-112161	14	Sequence 112161,
38	46	54.8	3096	c	US-10-027-632-112162	14	Sequence 112162,
39	46	54.8	3096	c	US-10-027-632-113958	14	Sequence 113958,
40	46	54.8	3096	c	US-10-027-632-113959	14	Sequence 113959,
41	46	54.8	8100		US-09-190-246-4	13	Sequence 4, Appli
42	46	54.8	10610		US-09-994-412-3	11	Sequence 3, Appli
43	46	54.8	11517		US-09-901-106-1	10	Sequence 1, Appli
44	46	54.8	15538		US-09-190-246-1	13	Sequence 1, Appli
45	45	53.6	463		US-09-983-965-4018	10	Sequence 4018, Ap

                         ALIGNMENTS

```
RESULT 1
US-10-305-720-927
; Sequence 927, Application US/10305720
; Publication No. US2004010136A1
; GENERAL INFORMATION:
;  APPLICANT: Au-Young, Janice K.; Seilhamer, Jeffrey J.
;  TITLE OF INVENTION: Composition for the Detection of Signaling Pathway Gene Expressio
;  FILE REFERENCE: PA-0002-1 CON
;  CURRENT APPLICATION NUMBER: US/10/305,720
;  CURRENT FILING DATE: 2002-11-26
;  PRIOR APPLICATION NUMBER: 09/016,434
;  PRIOR FILING DATE: 1998-01-30
;  NUMBER OF SEQ ID NOS: 1490
;  SOFTWARE: PERL Program
SEQ ID NO 927
  LENGTH: 237
  TYPE: DNA
  ORGANISM: Homo sapiens
  FEATURE:
  NAME/KEY: misc_feature
  OTHER INFORMATION: Incyte ID No. US2004010136A1 773734
US-10-305-720-927

Alignment Scores:
```

```
Pred. No.:                 3.23e-06    Length:           237
Score:                    84.00       Matches:           16
Percent Similarity:      100.00%      Conservative:       0
Best Local Similarity:   100.00%      Mismatches:         0
Query Match:             100.00%      Indels:             0
DB:                       12          Gaps:               0

US-08-978-217-12 (1-16)  x US-10-305-720-927 (1-237)

Qy     1 LysAsnSerSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
         ||||||||||||||||||||||||||||||||||||||||||||||
Db   116 AAAAACTCAAGCGCTGGAAGGAGGAAGGAGGTTCTCCAGAGTCGGAAC 163

RESULT 2
US-09-998-598-32
; Sequence 32, Application US/09998598
; Patent No. US20020150922A1
GENERAL INFORMATION:
; APPLICANT: Stolk, John A.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Chenault, Ruth A.
; APPLICANT: Meagher, Madelein Joy
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER
; FILE REFERENCE: 210121.561
; CURRENT APPLICATION NUMBER: US/09/998,598
; CURRENT FILING DATE: 2001-11-16
; NUMBER OF SEQ ID NOS: 2606
; SOFTWARE: Corixa Invention Disclosure Database
; SEQ ID NO 32
;   LENGTH: 451
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-998-598-32

Alignment Scores:
Pred. No.:                 6.43e-06    Length:           451
Score:                    84.00       Matches:           16
Percent Similarity:      100.00%      Conservative:       0
Best Local Similarity:   100.00%      Mismatches:         0
Query Match:                          Indels:             0
DB:                       10          Gaps:               0

US-08-978-217-12 (1-16)  x US-09-998-598-32  (1-451)

Qy     1 LysAsnSerSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
         ||||||||||||||||||||||||||||||||||||||||||||||
Db   170 AAAAACTCAAGCGCTGGAAGGAGGAAGGAGGTTCTCCAGAGTCGGAAC 217

RESULT 3
US-09-998-598-2290/c
; Sequence 2290, Application US/09998598
; Patent No. US20020150922A1
GENERAL INFORMATION:
; APPLICANT: Stolk, John A.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Chenault, Ruth A.
; APPLICANT: Meagher, Madelein Joy
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER
; FILE REFERENCE: 210121.561
; CURRENT APPLICATION NUMBER: US/09/998,598
; CURRENT FILING DATE: 2001-11-16
; NUMBER OF SEQ ID NOS: 2606
; SOFTWARE: Corixa Invention Disclosure Database
; SEQ ID NO 2290
;   LENGTH: 499
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-998-598-2290

Alignment Scores:
Pred. No.:                 7.17e-06    Length:           499
```

```
Score:                    84.00       Matches:           16
Percent Similarity:      100.00%      Conservative:       0
Best Local Similarity:   100.00%      Mismatches:         0
Query Match:             100.00%      Indels:             0
DB:                                   Gaps:              10

US-08-978-217-12 (1-16)  x US-09-998-598-2290 (1-499)

Qy     1 LysAsnSerSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
         ||||||||||||||||||||||||||||||||||||||||||||||
Db    95 AAAAACTCAAGCGCTGGAAGGAGGAAGGAGGTTCTCCAGAGTCGGAAC 48

RESULT 4
US-10-066-543-3233
; Sequence 3233, Application US/10066543
; Publication No. US20030087818A1
GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Pyle, Ruth A.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Indirias, Carol Yoseph
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Carter, Darrick
; APPLICANT: Fanger, Gary R.
; APPLICANT: Smith, Carole L.
; APPLICANT: Durham, Margarita
; APPLICANT: Stolk, John A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
; TITLE OF INVENTION:  AND DIAGNOSIS OF COLON CANCER
; FILE REFERENCE: 210121.563
; CURRENT APPLICATION NUMBER: US/10/066,543
; CURRENT FILING DATE: 2002-01-31
; NUMBER OF SEQ ID NOS: 3417
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 3233
;   LENGTH: 528
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;     NAME/KEY: misc_feature
;     LOCATION: 438
;     OTHER INFORMATION: n = A,T,C or G
US-10-066-543-3233

Alignment Scores:
Pred. No.:                 7.62e-06    Length:           528
Score:                    84.00       Matches:           16
Percent Similarity:      100.00%      Conservative:       0
Best Local Similarity:   100.00%      Mismatches:         0
Query Match:                          Indels:             0
DB:                       15          Gaps:               0

US-08-978-217-12 (1-16)  x US-10-066-543-3233  (1-528)

Qy     1 LysAsnSerSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
         ||||||||||||||||||||||||||||||||||||||||||||||
Db    63 AAAAACTCAAGCGCTGGAAGGAGGAAGGAGGTTCTCCAGAGTCGGAAC 110

RESULT 5
US-10-060-036-2379
; Sequence 2379, Application US/10060036
; Publication No. US20030073144A1
GENERAL INFORMATION:
; APPLICANT: Benson, Darin R.
; APPLICANT: Kalos, Michael D.
; APPLICANT: Lodes, Michael J.
; APPLICANT: Persing, David H.
; APPLICANT: Hepler, William T.
; APPLICANT: Jiang, Yuqiu
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
; TITLE OF INVENTION:  AND DIAGNOSIS OF PANCREATIC CANCER
; FILE REFERENCE: 210121.566
```

```
;   CURRENT APPLICATION NUMBER: US/10/060,036
;   CURRENT FILING DATE: 2002-01-30
;   NUMBER OF SEQ ID NOS: 4560
;   SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 2379
;   LENGTH: 620
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: 169, 456, 487, 488, 602
;   OTHER INFORMATION: n = A,T,C or G
US-10-060-036-2379

Alignment Scores:
Pred. No.:                    9.05e-06        Length:          620
Score:                        84.00           Matches:         16
Percent Similarity:           100.00%         Conservative:    0
Best Local Similarity:        100.00%         Mismatches:      0
Query Match:                  15              Indels:          0
DB:                                           Gaps:            0

US-08-978-217-12 (1-16) x US-10-060-036-2379 (1-620)

Qy      1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
           ||||||||||||||||||||||||||||||||||||||||||||||||
Db     63 AAAAACTCAAGCGCTGGAAGGAGGAAGAGAGGTTCTCCAGAGTCGGAAC 110

RESULT 6
US-10-097-340-74
; Sequence 74, Application US/10097340
; Publication No. US20030087250A1
; GENERAL INFORMATION:
;   APPLICANT: John MONAHAN
;   APPLICANT: Manjula GANNAVARAPU
;   APPLICANT: Sebastian HOERSCH
;   APPLICANT: Shubhangi KAWATKAR
;   APPLICANT: Steve G. KOVATS
;   APPLICANT: Rachel E. MEYERS
;   APPLICANT: Michael MORRISEY
;   APPLICANT: Peter OLANDT
;   APPLICANT: Ami SEN
;   APPLICANT: Peter VEIBY
;   APPLICANT: Gordon B. MILLS
;   APPLICANT: Robert C. BAST, Jr.
;   APPLICANT: Karen LU
;   APPLICANT: Rosemarie SCHMANDT
;   APPLICANT: Xumei ZHAO
;   APPLICANT: Karen GLATT
;   TITLE OF INVENTION: Nucleic Acid Molecules and Proteins For The Identification,
;   TITLE OF INVENTION: Assessment, Prevention, and Therapy of Ovarian Cancer
;   FILE REFERENCE: MRI-030
;   CURRENT APPLICATION NUMBER: US/10/097,340
;   CURRENT FILING DATE: 2002-03-14
;   PRIOR APPLICATION NUMBER: 60/276,025
;   PRIOR FILING DATE: 2001-03-14
;   PRIOR APPLICATION NUMBER: 60/325,149
;   PRIOR FILING DATE: 2001-09-26
;   PRIOR APPLICATION NUMBER: 60/276,026
;   PRIOR FILING DATE: 2001-03-14
;   PRIOR APPLICATION NUMBER: 60/324,967
;   PRIOR FILING DATE: 2001/09/26
;   PRIOR APPLICATION NUMBER: 60/311,732
;   PRIOR FILING DATE: 2001-08-10
;   PRIOR APPLICATION NUMBER: 60/325,102
;   PRIOR FILING DATE: 2001-09-26
;   PRIOR APPLICATION NUMBER: 60/323,580
;   PRIOR FILING DATE: 2001-09-19
;   NUMBER OF SEQ ID NOS: 363
;   SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 74
;   LENGTH: 1907
;   TYPE: DNA


;   ORGANISM: Homo sapiens
US-10-097-340-74

Alignment Scores:
Pred. No.:                    3.02e-05        Length:          1907
Score:                        84.00           Matches:         16
Percent Similarity:           100.00%         Conservative:    0
Best Local Similarity:        100.00%         Mismatches:      0
Query Match:                  15              Indels:          0
DB:                                           Gaps:            0

US-08-978-217-12 (1-16) x US-10-097-340-74 (1-1907)

Qy      1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
           ||||||||||||||||||||||||||||||||||||||||||||||||
Db   1161 AAAAACTCAAGCGCTGGAAGGAGGAAGAGAGGTTCTCCAGAGTCGGAAC 1208

RESULT 7
US-09-964-824A-101
; Sequence 101, Application US/09964824A
; Patent No. US2002010253 1A1
; GENERAL INFORMATION:
;   APPLICANT: Horrigan, Stephen
;   TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;   TITLE OF INVENTION: Sets
;   FILE REFERENCE: 689290-73
;   CURRENT APPLICATION NUMBER: US/09/964,824A
;   CURRENT FILING DATE: 2001-09-27
;   PRIOR APPLICATION NUMBER: US/60/236,033
;   PRIOR FILING DATE: 2000-09-28
;   PRIOR APPLICATION NUMBER: US/60/236,032
;   PRIOR FILING DATE: 2000-09-28
;   PRIOR APPLICATION NUMBER: US/60/236,028
;   PRIOR FILING DATE: 2000-09-28
;   NUMBER OF SEQ ID NOS: 583
;   SOFTWARE: PatentIn version 3.0
; SEQ ID NO 101
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-964-824A-101

Alignment Scores:
Pred. No.:                    3.03e-05        Length:          1915
Score:                        84.00           Matches:         16
Percent Similarity:           100.00%         Conservative:    0
Best Local Similarity:        100.00%         Mismatches:      0
Query Match:                  10              Indels:          0
DB:                                           Gaps:            0

US-08-978-217-12 (1-16) x US-09-964-824A-101 (1-1915)

Qy      1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
           ||||||||||||||||||||||||||||||||||||||||||||||||
Db   1185 AAAAACTCAAGCGCTGGAAGGAGGAAGAGAGGTTCTCCAGAGTCGGAAC 1232

RESULT 8
US-09-964-824A-563
; Sequence 563, Application US/09964824A
; Patent No. US2002010253 1A1
; GENERAL INFORMATION:
;   APPLICANT: Horrigan, Stephen
;   TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;   TITLE OF INVENTION: Sets
;   FILE REFERENCE: 689290-73
;   CURRENT APPLICATION NUMBER: US/09/964,824A
;   CURRENT FILING DATE: 2001-09-27
;   PRIOR APPLICATION NUMBER: US/60/236,033
;   PRIOR FILING DATE: 2000-09-28
;   PRIOR APPLICATION NUMBER: US/60/236,032
;   PRIOR FILING DATE: 2000-09-28
;   PRIOR APPLICATION NUMBER: US/60/236,028
;   PRIOR FILING DATE: 2000-09-28
```

; NUMBER OF SEQ ID NOS: 583
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 563
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-964-824A-563

Alignment Scores:
Pred. No.:   3.03e-05   Length: 1915
Score: 84.00   Matches: 16
Percent Similarity: 100.00%   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 100.00%   Indels: 0
DB: Gaps: 0

US-08-978-217-12 (1-16) x US-09-964-824A-563 (1-1915)

Qy   1 LysAsnSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
        ||||||||||||||||||||||||||||||||||||||||||||||
Db 1185 AAAAACTCAAGCGGCTGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1232

RESULT 9
US-09-880-107-3420
; Sequence 3420, Application US/09880107
; Patent No. US20020142981A1
; GENERAL INFORMATION:
; APPLICANT: Horne, Darci T.
; APPLICANT: Vockley, Joseph G.
; APPLICANT: Scherf, Uwe
; APPLICANT: Gene Logic, Inc.
; TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
; FILE REFERENCE: 44921-5028-WO
; CURRENT APPLICATION NUMBER: US/09/880,107
; CURRENT FILING DATE: 2001-06-14
; PRIOR APPLICATION NUMBER: US 60/211,379
; PRIOR FILING DATE: 2000-06-14
; PRIOR APPLICATION NUMBER: US 60/237,054
; PRIOR FILING DATE: 2000-10-02
; NUMBER OF SEQ ID NOS: 3950
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3420
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Genbank Accession No. US20020142981A1 U73843
US-09-880-107-3420

Alignment Scores:
Pred. No.:   3.03e-05   Length: 1915
Score: 84.00   Matches: 16
Percent Similarity: 100.00%   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 100.00%   Indels: 0
DB: Gaps: 0

US-08-978-217-12 (1-16) x US-09-880-107-3420 (1-1915)

Qy   1 LysAsnSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
        ||||||||||||||||||||||||||||||||||||||||||||||
Db 1185 AAAAACTCAAGCGGCTGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1232

RESULT 10
US-09-967-768A-192
; Sequence 192, Application US/09967768A
; Patent No. US2002015087A1
; GENERAL INFORMATION:
; APPLICANT: Augustus, Meena
; TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
; TITLE OF INVENTION: Sets
; FILE REFERENCE: 689290-72
; CURRENT APPLICATION NUMBER: US/09/967,768A
; CURRENT FILING DATE: 2001-09-28
; PRIOR APPLICATION NUMBER: US/60/236,109
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,034
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,111
; PRIOR FILING DATE: 2000-09-28
; NUMBER OF SEQ ID NOS: 325
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 192
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-967-768A-192

Alignment Scores:
Pred. No.:   3.03e-05   Length: 1915
Score: 84.00   Matches: 16
Percent Similarity: 100.00%   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 100.00%   Indels: 0
DB: Gaps: 10

US-08-978-217-12 (1-16) x US-09-967-768A-192 (1-1915)

Qy   1 LysAsnSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
        ||||||||||||||||||||||||||||||||||||||||||||||
Db 1185 AAAAACTCAAGCGGCTGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1232

RESULT 11
US-09-922-217-1105
; Sequence 1105, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Serrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole Lynn
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C13
; CURRENT APPLICATION NUMBER: US/09/922,217
; CURRENT FILING DATE: 2001-08-03
; NUMBER OF SEQ ID NOS: 1124
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
; LENGTH: 1917
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-922-217-1105

Alignment Scores:
Pred. No.:   3.03e-05   Length: 1917
Score: 84.00   Matches: 16
Percent Similarity: 100.00%   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 100.00%   Indels: 0
DB: Gaps: 9

US-08-978-217-12 (1-16) x US-09-922-217-1105 (1-1917)

Qy   1 LysAsnSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
        ||||||||||||||||||||||||||||||||||||||||||||||
Db 1187 AAAAACTCAAGCGGCTGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1234

RESULT 12
US-10-025-380-1105
; Sequence 1105, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole L.
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Skeiky, Yasir A. W.
; APPLICANT: Fanger, Gary R.
; APPLICANT: Vedvick, Thomas S.
; APPLICANT: Carter, Darrick
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C14
; CURRENT APPLICATION NUMBER: US/10/025,380
; CURRENT FILING DATE: 2001-12-19
; NUMBER OF SEQ ID NOS: 1129
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
; LENGTH: 1917
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-025-380-1105

Alignment Scores:
Pred. No.:   3.03e-05   Length: 1917
Score: 84.00   Matches: 16
Percent Similarity: 100.00%   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 100.00%   Indels: 0
DB: 14   Gaps: 0

US-08-978-217-12 (1-16) x US-10-025-380-1105 (1-1917)

Qy   1 LysAsnSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
          ||||||||||||||||||||||||||||||||||||||||||||||||
Db   1187 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1234

RESULT 13
US-10-264-049-756
; Sequence 756, Application US/10264049
; Publication No. US20040005579A1
; GENERAL INFORMATION:
; APPLICANT: Birse et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
; FILE REFERENCE: PA133PI
; CURRENT APPLICATION NUMBER: US/10/264,049
; CURRENT FILING DATE: 2002-10-04
; PRIOR APPLICATION NUMBER: PCT/US01/18569
; PRIOR FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: US 60/209,467
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 4360
; SOFTWARE: PatentIn Ver. 3.1
; SEQ ID NO 756
; LENGTH: 1956
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-264-049-756

Alignment Scores:
Pred. No.:   3.1e-05   Length: 1956
Score: 84.00   Matches: 16

Percent Similarity: 100.00%   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 100.00%   Indels: 0
DB: 12   Gaps: 0

US-08-978-217-12 (1-16) x US-10-264-049-756 (1-1956)

Qy   1 LysAsnSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
          ||||||||||||||||||||||||||||||||||||||||||||||||
Db   1226 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1273

RESULT 14
US-09-925-301-207
; Sequence 207, Application US/09925301
; Patent No. US2002052308A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
; FILE REFERENCE: PA106
; CURRENT APPLICATION NUMBER: US/09/925,301
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: PCT/US00/05882
; PRIOR FILING DATE: 2000-03-08
; PRIOR APPLICATION NUMBER: 60/124,270
; PRIOR FILING DATE: 1999-03-12
; NUMBER OF SEQ ID NOS: 1694
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 207
; LENGTH: 1996
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-925-301-207

Alignment Scores:
Pred. No.:   3.17e-05   Length: 1996
Score: 84.00   Matches: 16
Percent Similarity: 100.00%   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 100.00%   Indels: 0
DB: 9   Gaps: 0

US-08-978-217-12 (1-16) x US-09-925-301-207 (1-1996)

Qy   1 LysAsnSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
          ||||||||||||||||||||||||||||||||||||||||||||||||
Db   1206 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1253

RESULT 15
US-10-131-410-64
; Sequence 64, Application US/10131410
; Publication No. US20030235915A1
; GENERAL INFORMATION:
; APPLICANT: SPECHT, THOMAS
; APPLICANT: HINZMANN, BERND
; APPLICANT: SCHMITT, ARMIN
; APPLICANT: PILARSKY, CHRISTIAN
; APPLICANT: DAHL, EDGAR
; APPLICANT: ROSENTHAL, ANDRE
; TITLE OF INVENTION: HUMAN NUCLEIC ACID SEQUENCES FROM TISSUE OF BREAST
; TITLE OF INVENTION: TUMORS
; FILE REFERENCE: SCH-1763
; CURRENT APPLICATION NUMBER: US/10/131,410
; CURRENT FILING DATE: 2002-04-25
; PRIOR APPLICATION NUMBER: 09/646,673
; PRIOR FILING DATE: 2000-09-20
; PRIOR APPLICATION NUMBER: PCT/DE99/00908
; PRIOR FILING DATE: 1999-03-19
; NUMBER OF SEQ ID NOS: 202
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 64
; LENGTH: 2269
; TYPE: DNA
; ORGANISM: Homo sapiens

US-10-131-410-64

Alignment Scores:
Pred. No.:
Score: 3.63e-05
Percent Similarity: 84.00
Best Local Similarity: 100.00%
Query Match: 100.00%
DB: 12

Length: 2269
Matches: 16
Conservative: 0
Mismatches: 0
Indels: 0
Gaps: 0

US-08-978-217-12 (1-16) x US-10-131-410-64 (1-2269)

Qy   1 LysAsnSerSerGlyTrpLysGluGluValLeuGlnSerArgAsn 16
        ||||||||||||||||||||||||||||||||||||||||||||||||
Db 916 AAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 963

Search completed: February 13, 2004, 01:46:08
Job time : 28.2461 secs

GenCore version 5.1.6

Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - nucleic search, using frame_plus_p2n model

Run on: February 12, 2004, 21:34:51 ; Search time 132.542 Seconds
(without alignments)
2334.540 Million cell updates/sec

Title: US-08-978-217-7
Perfect score: 445
Sequence: 1 NCALEELRLVFGPLGDQLHA........ELLDDGQQASPYHPGSCGAG 84

Scoring table: BLOSUM62
Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 249703 seqs, 181816367 residues

Total number of hits satisfying chosen parameters: 4899406

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Command line parameters:
-MODEL=frame+_p2n.model -DEV=xlh
-Q=/cgn2_1/USPTO_spool/US08978217/runat_10022004_133827_20514/app_query.fasta_1.1500
-DB=Published_Applications_NA -QFMT=fastap -SUFIX=rnpb -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -NORM=ext -HEAPSIZE=500 -MINLEN=0
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=2000000000 -USER=US08978217 @CGN_1_1_690 @runat_10022004_133827_20514
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Published_Applications_NA:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq2:*
14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
16: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
17: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
18: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Match	Length	Pred No.	DB ID	Description
c 1	445	100.0	445	563	9	US-09-922-217-944	Sequence 944, App
c 2	445	100.0	445	563	10	US-09-833-263-944	Sequence 944, App
c 3	445	100.0	445	563	14	US-10-025-380-944	Sequence 944, App
c 4	445	100.0	445	626	10	US-09-922-217-853	Sequence 853, App
c 5	445	100.0	445	626	14	US-09-833-263-853	Sequence 853, Appl
c 6	445	100.0	445	626	14	US-10-025-380-853	Sequence 853, App
7	445	100.0	445	1907	15	US-10-097-30-74	Sequence 74, Appl
8	445	100.0	445	1915	10	US-09-964-824A-101	Sequence 101, App
9	445	100.0	445	1915	10	US-09-964-824A-563	Sequence 563, App
10	445	100.0	445	1915	10	US-09-980-107-3420	Sequence 3420, App
11	445	100.0	445	1915	10	US-09-967-768A-192	Sequence 192, App
12	445	100.0	445	1917	9	US-09-922-217-1105	Sequence 1105, Ap
13	445	100.0	445	1917	14	US-10-025-380-1105	Sequence 1105, Ap
14	445	100.0	445	1956	12	US-10-264-049-756	Sequence 756, App
15	445	100.0	445	1996	9	US-09-925-301-207	Sequence 207, App
16	445	100.0	445	2269	12	US-10-131-410-64	Sequence 64, Appl
17	439	98.7	439	355	10	US-09-867-701-4818	Sequence 4818, Ap
c 18	305	68.5	305	174	10	US-09-898-598-1740	Sequence 1740, Ap
c 19	111	24.9	111	437	10	US-09-898-598-2216	Sequence 2216, Ap
20	84	18.9	84	641	13	US-10-027-632-199194	Sequence 199194,
21	84	18.9	84	641	13	US-10-027-632-199195	Sequence 199195,
22	84	18.9	84	641	13	US-10-027-632-199196	Sequence 199196,
23	84	18.9	84	641	13	US-10-027-632-199197	Sequence 199197,
24	84	18.9	84	641	13	US-10-027-632-199198	Sequence 199198,
25	84	18.9	84	641	14	US-10-027-632-199194	Sequence 199194,
26	84	18.9	84	641	14	US-10-027-632-199195	Sequence 199195,
27	84	18.9	84	641	14	US-10-027-632-199196	Sequence 199196,
28	84	18.9	84	641	14	US-10-027-632-199197	Sequence 199197,
29	84	18.9	84	641	14	US-10-027-632-199198	Sequence 199198,
30	73.5	16.5	73.5	1341	15	US-10-156-761-5009	Sequence 5009, Ap
c 31	73.5	16.5	73.5	9025608	12	US-10-156-761-1	Sequence 1, Appli
c 32	73	16.4	73	1005	15	US-10-369-493-40562	Sequence 40562, A
33	72	16.2	72	353	10	US-09-864-761-3195	Sequence 3195, Ap
c 34	72	16.2	72	398	15	US-09-854-133-697	Sequence 697, App
c 35	72	16.2	72	407	15	US-10-144-649A-697	Sequence 697, App
c 36	72	16.2	72	410	11	US-09-918-995-36824	Sequence 36824, A
c 37	72	16.2	72	521	11	US-09-918-995-16413	Sequence 16413, A
c 38	72	16.2	72	521	10	US-09-884-441-139	Sequence 139, App
c 39	72	16.2	72	521	11	US-09-907-969-139	Sequence 139, App
c 40	72	16.2	72	521	13	US-09-827-271-139	Sequence 139, App
c 41	72	16.2	72	551	15	US-10-198-053-139	Sequence 139, App
42	72	16.2	72	551	10	US-09-884-441-92	Sequence 92, Appl
43	72	16.2	72	551	11	US-09-907-969-92	Sequence 92, Appl
c 44	72	16.2	72	551	13	US-09-827-271-92	Sequence 92, Appl
c 45	72	16.2	72	551	15	US-10-198-053-92	Sequence 92, Appl

ALIGNMENTS

RESULT 1
US-09-922-217-944/c
; Sequence 944, Application US/09922217
; Patent No. US20020076411A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole Lynn
; APPLICANT: Wang, Aijun
; APPLICANT: King, Gordon E.
; APPLICANT: Clapper, Jonathan D.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C13
; CURRENT APPLICATION NUMBER: US/09/922,217
; CURRENT FILING DATE: 2001-08-03
; NUMBER OF SEQ ID NOS: 1124
; SOFTWARE: FastSEQ for Windows Version 4.0

```
; SEQ ID NO 944
; LENGTH: 563
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-922-217-944

Alignment Scores:
Pred. No.:              1.02e-55       Length:         563
Score:                  445.00         Matches:         84
Percent Similarity:     100.00%        Conservative:     0
Best Local Similarity:  100.00%        Mismatches:       0
Query Match:            100.00%        Indels:           0
DB:                                    Gaps:             9

US-08-978-217-7 (1-84) x US-09-922-217-944 (1-563)

Qy    1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  472 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTCGGGGACCAACTCCATGCC 413

Qy   21 GlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  412 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTGTCAGTTGATCATTGAGCTGCTG 353

Qy   41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  352 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 293

Qy   61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  292 CCCTTTGCCAGGAGCTGCTGGACGACGGTCAGCAGCCAGCCCCTACCACCCCGGCAGC 233

Qy   81 CysGlyAlaGly 84
          ||||||||||||
Db  232 TGTGGCGCAGGA 221
```

RESULT 2
US-09-833-263-944/c
; Sequence 944, Application US/09833263
; Patent No. US20020110547A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Stolk, John A.
; APPLICANT: Meagher, Madeleine J.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C12
; CURRENT APPLICATION NUMBER: US/09/833,263
; CURRENT FILING DATE: 2001-04-10
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 944
; LENGTH: 563
; TYPE: DNA
; ORGANISM: Homo sapien
US-09-833-263-944

```
Alignment Scores:
Pred. No.:              1.02e-55       Length:         563
Score:                  445.00         Matches:         84
Percent Similarity:     100.00%        Conservative:     0
Best Local Similarity:  100.00%        Mismatches:       0
Query Match:            100.00%        Indels:           0
DB:                                    Gaps:            10

US-08-978-217-7 (1-84) x US-09-833-263-944 (1-563)

Qy    1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  472 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTCGGGGACCAACTCCATGCC 413

Qy   21 GlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
```

RESULT 3
US-10-025-380-944/c
; Sequence 944, Application US/10025380
; Publication No. US2002018219l1A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole L.
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Skeiky, Yasir A. W.
; APPLICANT: Fanger, Gary R.
; APPLICANT: Vedvick, Thomas S.
; APPLICANT: Carter, Darrick
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C14
; CURRENT APPLICATION NUMBER: US/10/025,380
; CURRENT FILING DATE: 2001-12-19
; NUMBER OF SEQ ID NOS: 1129
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 944
; LENGTH: 563
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-025-380-944

```
Alignment Scores:
Pred. No.:              1.02e-55       Length:         563
Score:                  445.00         Matches:         84
Percent Similarity:     100.00%        Conservative:     0
Best Local Similarity:  100.00%        Mismatches:       0
Query Match:            100.00%        Indels:           0
DB:                                    Gaps:            14

US-08-978-217-7 (1-84) x US-10-025-380-944 (1-563)

Qy    1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  472 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTCGGGGACCAACTCCATGCC 413

Qy   21 GlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  412 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTGTCAGTTGATCATTGAGCTGCTG 353

Qy   41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  352 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 293

Qy   61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
```

Db   292 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCCAGC 233

Qy   81 CysGlyAlaGly 84

Db   232 TGTGGCGCAGGA 221

RESULT 4
US-09-922-217-853/c
; Sequence 853, Application US/09922217
; Patent No. US2002007614A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole Lynn
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C13
; CURRENT APPLICATION NUMBER: US/09/922,217
; CURRENT FILING DATE: 2001-08-03
; NUMBER OF SEQ ID NOS: 1124
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 853
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-922-217-853

Alignment Scores:
Pred. No.:   1.16e-55   Length: 626
Score: 445.00   Matches: 84
Percent Similarity: 100.00%   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 100.00%   Indels: 0
DB: 9   Gaps: 0

US-08-978-217-7 (1-84) x US-09-922-217-853 (1-626)

Qy   1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20

Db 471 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGACCAACTCCATGCC 412

Qy   21 GlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40

Db 411 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 352

Qy   41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProPheAspGlnGlySer 60

Db 351 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 292

Qy   61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80

Db 291 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCCAGC 232

Qy   81 CysGlyAlaGly 84

Db 231 TGTGGCGCAGGA 220

RESULT 5
US-09-833-263-853/c
; Sequence 853, Application US/09833263
; Patent No. US2002011054A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.

APPLICANT: Stolk, John A.
; APPLICANT: Meagher, Madeleine J.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C12
; CURRENT APPLICATION NUMBER: US/09/833,263
; CURRENT FILING DATE: 2001-04-10
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 853.
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Homo sapien
US-09-833-263-853

Alignment Scores:
Pred. No.:   1.16e-55   Length: 626
Score: 445.00   Matches: 84
Percent Similarity: 100.00%   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 100.00%   Indels: 0
DB: 10   Gaps: 0

US-08-978-217-7 (1-84) x US-09-833-263-853 (1-626)

Qy   1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20

Db 471 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGACCAACTCCATGCC 412

Qy   21 GlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40

Db 411 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 352

Qy   41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProPheAspGlnGlySer 60

Db 351 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 292

Qy   61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80

Db 291 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 232

Qy   81 CysGlyAlaGly 84

Db 231 TGTGGCGCAGGA 220

RESULT 6
US-10-025-380-853/c
; Sequence 853, Application US/10025380
; Publication No. US2002018191A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole L.
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Skeiky, Yasir A. W.
; APPLICANT: Fanger, Gary R.
; APPLICANT: Vedvick, Thomas S.
; APPLICANT: Carter, Darrick
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C14
; CURRENT APPLICATION NUMBER: US/10/025,380
; CURRENT FILING DATE: 2001-12-19
; NUMBER OF SEQ ID NOS: 1129
; SOFTWARE: FastSEQ for Windows Version 4.0

```
; SEQ ID NO 853
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-025-380-853

Alignment Scores:
Pred. No.:              1.16e-55        Length:           626
Score:                  445.00          Matches:          84
Percent Similarity:     100.00%         Conservative:     0
Best Local Similarity:  100.00%         Mismatches:       0
Query Match:            100.00%         Indels:           0
DB:                     14              Gaps:             0

US-08-978-217-7 (1-84) x US-10-025-380-853 (1-626)

Qy    1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyAspGlnLeuHisAla 20
        ||||||||||||||||||||||||||||||||||||||||||||||||||
Db  471 AATTGTGCCCTTGAGGAGCTGCGTCTTGGTCTTGGCCTCTGGGGGGACCAACTCCATGCC 412

Qy   21 GlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
        ||||||||||||||||||||||||||||||||||||||||||||||||||
Db  411 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTTCAGTTGGATCATTGAGCTGCTG 352

Qy   41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
        ||||||||||||||||||||||||||||||||||||||||||||||||||
Db  351 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGCCCCTTTGACCAGGGCAGC 292

Qy   61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
        ||||||||||||||||||||||||||||||||||||||||||||||||||
Db  291 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 232

Qy   81 CysGlyAlaGly 84
        ||||||||||
Db  231 TGTGGCGCAGGA 220

RESULT 7
US-10-097-340-74
; Sequence 74, Application US/10097340
; Publication No. US20030087250A1
GENERAL INFORMATION:
; APPLICANT: John MONAHAN
; APPLICANT: Manjula GANNAVARAPU
; APPLICANT: Sebastian HOERSCH
; APPLICANT: Shubhangi KAMATKAR
; APPLICANT: Steve G. KOVATS
; APPLICANT: Rachel E. MEYERS
; APPLICANT: Michael MORRISEY
; APPLICANT: Peter OLANDT
; APPLICANT: Ami SEN
; APPLICANT: Peter VEIBY
; APPLICANT: Gordon B. MILLS
; APPLICANT: Robert C. BAST, Jr.
; APPLICANT: Karen LU
; APPLICANT: Rosemarie SCHMANDT
; APPLICANT: Xumei ZHAO
; APPLICANT: Karen GLATT
; TITLE OF INVENTION: Nucleic Acid Molecules and Proteins For The Identification,
; TITLE OF INVENTION: Assessment, Prevention, and Therapy of Ovarian Cancer
; FILE REFERENCE: MRI-030
; CURRENT APPLICATION NUMBER: US/10/097,340
; CURRENT FILING DATE: 2002-03-14
; PRIOR APPLICATION NUMBER: 60/276,025
; PRIOR FILING DATE: 2001-03-14
; PRIOR APPLICATION NUMBER: 60/325,149
; PRIOR FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: 60/276,026
; PRIOR FILING DATE: 2001-03-14
; PRIOR APPLICATION NUMBER: 60/324,967
; PRIOR FILING DATE: 2001/09/26
; PRIOR APPLICATION NUMBER: 60/311,732
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: 60/325,102
```

```
; PRIOR FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: 60/323,580
; PRIOR FILING DATE: 2001-09-19
; NUMBER OF SEQ ID NOS: 363
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 74
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-097-340-74

Alignment Scores:
Pred. No.:              4.83e-55        Length:           1907
Score:                  445.00          Matches:          84
Percent Similarity:     100.00%         Conservative:     0
Best Local Similarity:  100.00%         Mismatches:       0
Query Match:            100.00%         Indels:           0
DB:                     15              Gaps:             0

US-08-978-217-7 (1-84) x US-10-097-340-74 (1-1907)

Qy    1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyAspGlnLeuHisAla 20
        ||||||||||||||||||||||||||||||||||||||||||||||||||
Db  405 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTCGGGGGGACCAACTCCATGCC 464

Qy   21 GlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
        ||||||||||||||||||||||||||||||||||||||||||||||||||
Db  465 CAGCTGCGAGACCTCACTTCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 524

Qy   41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
        ||||||||||||||||||||||||||||||||||||||||||||||||||
Db  525 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGCCCCTTTGACCAGGGCAGC 584

Qy   61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
        ||||||||||||||||||||||||||||||||||||||||||||||||||
Db  585 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 644

Qy   81 CysGlyAlaGly 84
        ||||||||||
Db  645 TGTGGCGCAGGA 656

RESULT 8
US-09-964-824A-101
; Sequence 101, Application US/09964824A
; Patent No. US2002010253A1
GENERAL INFORMATION:
; APPLICANT: Horrigan, Stephen
; TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
; TITLE OF INVENTION: Sets
; FILE REFERENCE: 689290-73
; CURRENT APPLICATION NUMBER: US/09/964,824A
; CURRENT FILING DATE: 2001-09-27
; PRIOR APPLICATION NUMBER: US/60/236,033
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,032
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,028
; PRIOR FILING DATE: 2000-09-28
; NUMBER OF SEQ ID NOS: 583
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 101
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-964-824A-101

Alignment Scores:
Pred. No.:              4.86e-55        Length:           1915
Score:                  445.00          Matches:          84
Percent Similarity:     100.00%         Conservative:     0
Best Local Similarity:  100.00%         Mismatches:       0
Query Match:            100.00%         Indels:           0
DB:                     10              Gaps:             0
```

US-08-978-217-7 (1-84) x US-09-964-824A-101 (1-1915)

```
Qy   1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 429 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 488

Qy  21 GlnLeuArgAspLeuThrSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 489 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 548

Qy  41 GluLysAspGlyMetAlaPheGlnGluAlaAlaLeuAspProGlyProPheAspGlnGlySer 60
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 549 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTGACCAGGGCCCTTTGACCAGGGCAGC 608

Qy  61 ProPheAlaGlnLeuLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 609 CCCTTTGCCCAGGAGCTGCTGACGACGGTCAGCAGCAAGCCAGCCCCTACCACCCGGCAGC 668

Qy  81 CysGlyAlaGly 84
       ||||||||||||
Db 669 TGTGGCGCAGGA 680
```

RESULT 9
US-09-964-824A-563
; Sequence 563, Application US/09964824A
; Patent No. US2002102551A1
; GENERAL INFORMATION:
; APPLICANT: Horrigan, Stephen
; TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
; TITLE OF INVENTION: Sets
; FILE REFERENCE: 689290-73
; CURRENT APPLICATION NUMBER: US/09/964,824A
; CURRENT FILING DATE: 2001-09-27
; PRIOR APPLICATION NUMBER: US/60/236,033
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,032
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,028
; PRIOR FILING DATE: 2000-09-28
; NUMBER OF SEQ ID NOS: 583
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 563
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-964-824A-563

Alignment Scores:
Pred. No.:
Score: 4.86e-55   Length: 1915
Percent Similarity: 445.00   Matches: 84
Best Local Similarity: 100.00%   Conservative: 0
Query Match: 100.00%   Mismatches: 0
DB: 10   Indels: 0
                                       Gaps: 0

US-08-978-217-7 (1-84) x US-09-964-824A-563 (1-1915)

```
Qy   1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 429 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 488

Qy  21 GlnLeuArgAspLeuThrSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 489 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 548

Qy  41 GluLysAspGlyMetAlaPheGlnGluAlaAlaLeuAspProGlyProPheAspGlnGlySer 60
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 549 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTGACCAGGGCCCTTTGACCAGGGCAGC 608

Qy  61 ProPheAlaGlnLeuLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 609 CCCTTTGCCCAGGAGCTGCTGACGACGGTCAGCAGCAAGCCAGCCCCTACCACCCGGCAGC 668

Qy  81 CysGlyAlaGly 84
       ||||||||||||
Db 669 TGTGGCGCAGGA 680
```

RESULT 10
US-09-880-107-3420
; Sequence 3420, Application US/09880107
; Patent No. US2002142981A1
; GENERAL INFORMATION:
; APPLICANT: Horne, Darci T.
; APPLICANT: Vockley, Joseph G.
; APPLICANT: Scherf, Uwe
; APPLICANT: Gene Logic, Inc.
; TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
; FILE REFERENCE: 44921-5028-WO
; CURRENT APPLICATION NUMBER: US/09/880,107
; CURRENT FILING DATE: 2001-06-14
; PRIOR APPLICATION NUMBER: US 60/211,379
; PRIOR FILING DATE: 2000-06-14
; PRIOR APPLICATION NUMBER: US 60/237,054
; PRIOR FILING DATE: 2000-10-02
; NUMBER OF SEQ ID NOS: 3950
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3420
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Genbank Accesion No. US20020142981A1 U73843
US-09-880-107-3420

Alignment Scores:
Pred. No.:   Length: 1915
Score: 4.86e-55   Matches: 84
Percent Similarity: 445.00   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 100.00%   Indels: 0
DB: 10   Gaps: 0

US-08-978-217-7 (1-84) x US-09-880-107-3420 (1-1915)

```
Qy   1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 429 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 488

Qy  21 GlnLeuArgAspLeuThrSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 489 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 548

Qy  41 GluLysAspGlyMetAlaPheGlnGluAlaAlaLeuAspProGlyProPheAspGlnGlySer 60
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 549 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTGACCAGGGCCCTTTGACCAGGGCAGC 608

Qy  61 ProPheAlaGlnLeuLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 609 CCCTTTGCCCAGGAGCTGCTGACGACGGTCAGCAGCAAGCCAGCCCCTACCACCCCGGCAGC 668

Qy  81 CysGlyAlaGly 84
       ||||||||||||
Db 669 TGTGGCGCAGGA 680
```

RESULT 11
US-09-967-768A-192
; Sequence 192, Application US/09967768A
; Patent No. US2002015087A1
; GENERAL INFORMATION:
; APPLICANT: Augustus, Meena
; TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
; TITLE OF INVENTION: Sets
; FILE REFERENCE: 689290-72
; CURRENT APPLICATION NUMBER: US/09/967,768A
; CURRENT FILING DATE: 2001-09-28

; PRIOR APPLICATION NUMBER: US/60/236,109
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,034
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,111
; PRIOR FILING DATE: 2000-09-28
; NUMBER OF SEQ ID NOS: 325
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 192
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-967-768A-192

Alignment Scores:
Pred. No.:   4.86e-55   Length: 1915
Score: 445.00   Matches: 84
Percent Similarity: 100.00%   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 100.00%   Indels: 0
DB: Gaps: 0

US-08-978-217-7 (1-84) x US-09-967-768A-192 (1-1915)

Qy   1 AsnCysAlaLeuGluGluArgLeuArgLeuValPheGlyAspGlnLeuHisAla 20
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 429 AATTGTGCCCTTGAGGAGCGTCGGTCTTGGGCCTCTGGGGGACCAACTCCATGCC 488

Qy   21 GlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 489 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 548

Qy   41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspAspGlyProGlyGlnGlySer 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 549 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACGACGGTCAGGGCCCTTGACCAGGGCAGC 608

Qy   61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 609 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAGGCCAGCCCCTACCACCCCGGCAGC 668

Qy   81 CysGlyAlaGly 84
          ||||||||||||
Db 669 TGTGGCGCAGGA 680

RESULT 12
US-09-922-217-1105
; Sequence 1105, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole Lynn
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C13
; CURRENT APPLICATION NUMBER: US/09/922,217
; CURRENT FILING DATE: 2001-08-03
; NUMBER OF SEQ ID NOS: 1124
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
; LENGTH: 1917
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-922-217-1105

Alignment Scores:
Pred. No.:   4.86e-55   Length: 1917
Score: 445.00   Matches: 84
Percent Similarity: 100.00%   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 100.00%   Indels: 0
DB: Gaps: 9

US-08-978-217-7 (1-84) x US-09-922-217-1105 (1-1917)

Qy   1 AsnCysAlaLeuGluGluArgLeuArgLeuValPheGlyAspGlnLeuHisAla 20
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 431 AATTGTGCCCTTGAGGAGCGTCGGTCTTGGGCCTCTGGGGGACCAACTCCATGCC 490

Qy   21 GlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 491 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 550

Qy   41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspAspGlyProGlyGlnGlySer 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 551 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACGACGGTCAGGGCCCTTGACCAGGGCAGC 610

Qy   61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 611 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAGGCCAGCCCCTACCACCCCGGCAGC 670

Qy   81 CysGlyAlaGly 84
          ||||||||||||
Db 671 TGTGGCGCAGGA 682

RESULT 13
US-10-025-380-1105
; Sequence 1105, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole L.
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Skeiky, Yasir A. W.
; APPLICANT: Fanger, Gary R.
; APPLICANT: Vedvick, Thomas S.
; APPLICANT: Carter, Darrick
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C14
; CURRENT APPLICATION NUMBER: US/10/025,380
; CURRENT FILING DATE: 2001-12-19
; NUMBER OF SEQ ID NOS: 1129
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
; LENGTH: 1917
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-025-380-1105

Alignment Scores:
Pred. No.:   4.86e-55   Length: 1917
Score: 445.00   Matches: 84
Percent Similarity: 100.00%   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 100.00%   Indels: 0
DB: Gaps: 14

US-08-978-217-7 (1-84) x US-10-025-380-1105 (1-1917)

```
Qy    1 AsnCysAlaLeuGluGluGluArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
Db  431 AATTGTGCCCTTGAGGAGGCTGCGTCGTCGGTCTTTGGGCCTCTCGGGGGACCAACTCCATGCC 490
Qy   21 GlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
Db  491 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 550
Qy   41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
Db  551 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 610
Qy   61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnAlaSerProTyrHisProGlySer 80
Db  611 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 670
Qy   81 CysGlyAlaGly 84
Db  671 TGTGGCGCAGGA 682
```

RESULT 14
US-10-264-049-756
```
; Sequence 756, Application US/10264049
; Publication No. US20040005579A1
; GENERAL INFORMATION:
; APPLICANT: Birse et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
; FILE REFERENCE: PA131P1
; CURRENT APPLICATION NUMBER: US/10/264,049
; CURRENT FILING DATE: 2002-10-04
; PRIOR APPLICATION NUMBER: PCT/US01/18569
; PRIOR FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: US 60/209,467
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 4360
; SOFTWARE: PatentIn Ver. 3.1
; SEQ ID NO 756
; LENGTH: 1956
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-264-049-756
```

Alignment Scores:
```
Pred. No.:             4.99e-55    Length:         1956
Score:                 445.00      Matches:        84
Percent Similarity:    100.00%     Conservative:   0
Best Local Similarity: 100.00%     Mismatches:     0
Query Match:           100.00%     Indels:         0
DB:                    12          Gaps:           0
```

US-08-978-217-7 (1-84) x US-10-264-049-756 (1-1956)

```
Qy    1 AsnCysAlaLeuGluGluGluArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
Db  470 AATTGTGCCCTTGAGGAGGCTGCGTCGTCGGTCTTTGGGCCTCTCGGGGGACCAACTCCATGCC 529
Qy   21 GlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
Db  530 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 589
Qy   41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
Db  590 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 649
Qy   61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnAlaSerProTyrHisProGlySer 80
Db  650 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 709
Qy   81 CysGlyAlaGly 84
Db  710 TGTGGCGCAGGA 721
```

RESULT 15
US-09-925-301-207
```
; Sequence 207, Application US/09925301
; Patent No. US20020052308A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
; FILE REFERENCE: PA106
; CURRENT APPLICATION NUMBER: US/09/925,301
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: PCT/US00/05882
; PRIOR FILING DATE: 2000-03-08
; PRIOR APPLICATION NUMBER: 60/124,270
; PRIOR FILING DATE: 1999-03-12
; NUMBER OF SEQ ID NOS: 1694
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 207
; LENGTH: 1996
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-925-301-207
```

Alignment Scores:
```
Pred. No.:             5.12e-55    Length:         1996
Score:                 445.00      Matches:        84
Percent Similarity:    100.00%     Conservative:   0
Best Local Similarity: 100.00%     Mismatches:     0
Query Match:           100.00%     Indels:         0
DB:                    9           Gaps:           0
```

US-08-978-217-7 (1-84) x US-09-925-301-207 (1-1996)

```
Qy    1 AsnCysAlaLeuGluGluGluArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
Db  450 AATTGTGCCCTTGAGGAGGCTGCGTCGTCGGTCTTTGGGCCTCTCGGGGGACCAACTCCATGCC 509
Qy   21 GlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
Db  510 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 569
Qy   41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
Db  570 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 629
Qy   61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnAlaSerProTyrHisProGlySer 80
Db  630 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 689
Qy   81 CysGlyAlaGly 84
Db  690 TGTGGCGCAGGA 701
```

Search completed: February 13, 2004, 01:46:05
Job time : 139.542 secs

```
                    GenCore version 5.1.6
           Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on:          February 13, 2004, 01:27:22 ; Search time 88.6409 Seconds
                                              (without alignments)
                                    10448.744 Million cell updates/sec

Title:           US-08-978-217-6
Perfect score:   252
Sequence:        1 AATTGTGCCCTTGAGGAGCT..........CCGGCAGCTGTGGCGCCAGGA 252

Scoring table:   IDENTITY NUC
                 Gapop 10.0 , Gapext 1.0

Searched:        2449703 seqs, 1841816367 residues

Total number of hits satisfying chosen parameters:    4899406

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

Database :       Published Applications NA:*
                 1:  /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
                 2:  /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
                 3:  /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
                 4:  /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
                 5:  /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
                 6:  /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
                 7:  /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
                 8:  /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
                 9:  /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
                 10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
                 11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
                 12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
                 13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq2:*
                 14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
                 15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
                 16: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
                 17: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
                 18: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*
```

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
c 1	252	100.0	563	9	US-09-922-217-944	Sequence 944, App
c 2	252	100.0	563	10	US-09-833-263-944	Sequence 944, App
c 3	252	100.0	563	14	US-10-025-380-944	Sequence 944, App
c 4	252	100.0	626	9	US-09-922-217-853	Sequence 853, App
c 5	252	100.0	626	10	US-09-833-263-853	Sequence 853, App
c 6	252	100.0	626	14	US-10-025-380-853	Sequence 853, App
7	252	100.0	1907	15	US-10-097-340-74	Sequence 74, Appl
8	252	100.0	1915	10	US-09-964-824A-101	Sequence 101, App
9	252	100.0	1915	10	US-09-964-824A-563	Sequence 563, App
10	252	100.0	1915	10	US-09-880-107-3420	Sequence 3420, Ap
11	252	100.0	1915	9	US-09-967-768A-192	Sequence 192, App
12	252	100.0	1917	9	US-09-922-217-1105	Sequence 1105, Ap
13	252	100.0	1917	14	US-10-025-380-1105	Sequence 1105, Ap
14	252	100.0	1956	12	US-10-264-049-756	Sequence 756, App
15	252	100.0	1996	9	US-09-925-301-207	Sequence 207, App
16	252	100.0	2269	12	US-10-131-410-64	Sequence 64, Appl
17	249	98.8	355	10	US-09-867-701-4818	Sequence 4818, Ap
c 18	174	69.0	174	10	US-09-998-598-1740	Sequence 1740, Ap
c 19	63	25.0	437	10	US-09-998-598-2216	Sequence 2216, Ap
20	40.4	16.0	14889	13	US-10-101-510-356	Sequence 356, APP
21	40.4	16.0	14896	13	US-10-159-563-206	Sequence 206, App
22	38.8	15.4	532	13	US-10-027-632-280565	Sequence 280565,
23	38.8	15.4	532	14	US-10-027-632-280565	Sequence 280565,
24	38.8	15.4	534	13	US-10-029-386-11328	Sequence 11328, A
25	38.8	15.4	1011	13	US-10-029-386-25041	Sequence 25041, A
c 26	38.8	15.4	5173	10	US-09-880-107-3356	Sequence 3356, Ap
c 27	38.8	15.4	5173	15	US-10-171-581-159	Sequence 159, App
28	38.4	15.2	532	13	US-10-027-632-280564	Sequence 280564,
29	38.4	15.2	532	14	US-10-027-632-280564	Sequence 280564, A
c 30	37.2	14.8	1413	12	US-10-369-493-37726	Sequence 37726, A
c 31	36.4	14.4	560	13	US-10-027-632-159559	Sequence 159559,
c 32	36.4	14.4	560	14	US-10-027-632-159559	Sequence 159559,
c 33	36.2	14.4	1539	13	US-10-259-165-233	Sequence 233, App
34	35.8	14.2	275	9	US-09-923-876-4804	Sequence 4804, Ap
35	35.8	14.2	275	12	US-09-923-876-4804	Sequence 4804, Ap
c 36	35.2	14.0	13500	9	US-09-962-436-269	Sequence 269, App
c 37	35.2	14.0	13500	10	US-09-954-456-55	Sequence 55, Appl
c 38	35.2	14.0	13500	10	US-09-954-456-1132	Sequence 1132, Ap
c 39	35.2	14.0	13500	10	US-09-954-456-1801	Sequence 1801, Ap
c 40	35.2	14.0	13500	10	US-09-880-107-2265	Sequence 2265, Ap
c 41	35.2	14.0	13500	10	US-09-954-531-145	Sequence 145, App
c 42	35.2	14.0	13500	10	US-09-954-531-363	Sequence 363, App
43	35	13.9	2161	9	US-09-810-808-4	Sequence 4, Appli
c 44	35	13.9	19616	10	US-09-764-877-3220	Sequence 3220, Ap
c 45	35	13.9	19616	12	US-10-242-515-3220	Sequence 3220, Ap

ALIGNMENTS

```
RESULT 1
US-09-922-217-944/c
;  Sequence 944, Application US/09922217
;  Patent No. US2002007641A1
;  GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT: Lodes, Michael J.
;  APPLICANT: Secrist, Heather
;  APPLICANT: Benson, Darin R.
;  APPLICANT: Meagher, Madeleine Joy
;  APPLICANT: Stolk, John A.
;  APPLICANT: Wang, Tongtong
;  APPLICANT: Jiang, Yuqiu
;  APPLICANT: Smith, Carole Lynn
;  APPLICANT: King, Gordon E.
;  APPLICANT: Wang, Aijun
;  APPLICANT: Clapper, Jonathan D.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C13
;  CURRENT APPLICATION NUMBER: US/09/922,217
;  CURRENT FILING DATE: 2001-08-03
;  NUMBER OF SEQ ID NOS: 1124
;  SOFTWARE: FastSEQ for Windows Version 4.0
;  SEQ ID NO 944
;    LENGTH: 563
;    TYPE: DNA
;    ORGANISM: Homo sapiens
US-09-922-217-944

  Query Match          100.0%;  Score 252;  DB 9;  Length 563;
  Best Local Similarity 100.0%;  Pred. No. 2.1e-64;
  Matches 252;  Conservative 0;  Mismatches 0;  Indels 0;  Gaps 0;

Qy     1 AATTGTGCCCTTGAGGAGCTCGTCTTGGGCCTCTCGGGGACCAACTCCATGCC 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   472 AATTGTGCCCTTGAGGAGCTCGTCTTGGGCCTCTCGGGGACCAACTCCATGCC 413
```

```
Qy   61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGTCAGTTGGATCATTGAGCTGCTG 120
        |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  412 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGTCAGTTGGATCATTGAGCTGCTG 353

Qy  121 GAGAAGGATGGCATGGCCTTCCAGGAGCCCTTGACCAGGGCAGC 180
        ||||||||||||||||||||||||||||||||||||||||||||
Db  352 GAGAAGGATGGCATGGCCTTCCAGGAGCCCTTGACCAGGGCAGC 293

Qy  181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCAGCCCCGGCGGCAGC 240
        |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  292 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCAGCCCCGGCGGCAGC 233

Qy  241 TGTGGCGCAGGA 252
        ||||||||||||
Db  232 TGTGGCGCAGGA 221


RESULT 2
US-09-833-263-944/c
; Sequence 944, Application US/09833263
; Patent No. US20020110547A1
; GENERAL INFORMATION:
;   APPLICANT: Wang, Aijun
;   APPLICANT: Clapper, Jonathan D.
;   APPLICANT: Stolk, John A.
;   APPLICANT: Meagher, Madeleine J.
;   TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
;   TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.471C12
;   CURRENT APPLICATION NUMBER: US/09/833,263
;   CURRENT FILING DATE: 2001-04-10
;   NUMBER OF SEQ ID NOS: 1093
;   SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 944
;   LENGTH: 563
;   TYPE: DNA
;   ORGANISM: Homo sapien
US-09-833-263-944

Query Match         100.0%;  Score 252;  DB 10;  Length 563;
Best Local Similarity 100.0%;  Pred. No. 2.1e-64;
Matches  252;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy    1 AATTGTGCCCTTGAGGAGCTGCGTCTTGTGGGGACCTCTTGGGGGACCAACTCCATGCC 60
        |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  472 AATTGTGCCCTTGAGGAGCTGCGTCTTGTGGGGACCTCTTGGGGGACCAACTCCATGCC 413

Qy   61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGTCAGTTGGATCATTGAGCTGCTG 120
        |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  412 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGTCAGTTGGATCATTGAGCTGCTG 353

Qy  121 GAGAAGGATGGCATGGCCTTCCAGGAGCCCTTGACCAGGGCAGC 180
        ||||||||||||||||||||||||||||||||||||||||||||
Db  352 GAGAAGGATGGCATGGCCTTCCAGGAGCCCTTGACCAGGGCAGC 293

Qy  181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCAGCCCCGGCAGC 240
        |||||||||||||||||||||||||||||||||||||||||||||||||
Db  292 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCAGCCCCGGCAGC 233

Qy  241 TGTGGCGCAGGA 252
        ||||||||||||
Db  232 TGTGGCGCAGGA 221


RESULT 3
US-10-025-380-944/c
; Sequence 944, Application US/10025380
; Publication No. US20021821911A1
; GENERAL INFORMATION:
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Lodes, Michael J.
;   APPLICANT: Secrist, Heather
;   APPLICANT: Benson, Darin R.
;   APPLICANT: Meagher, Madeleine Joy
;   APPLICANT: Stolk, John A.
;   APPLICANT: Wang, Tongtong
;   APPLICANT: Jiang, Yuqiu
;   APPLICANT: Smith, Carole L.
;   APPLICANT: King, Gordon E.
;   APPLICANT: Wang, Aijun
;   APPLICANT: Clapper, Jonathan D.
;   APPLICANT: Skeiky, Yasir A. W.
;   APPLICANT: Fanger, Gary R.
;   APPLICANT: Vedvick, Thomas S.
;   APPLICANT: Carter, Darrick
;   TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;   TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.471C14
;   CURRENT APPLICATION NUMBER: US/10/025,380
;   CURRENT FILING DATE: 2001-12-19
;   NUMBER OF SEQ ID NOS: 1129
;   SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 944
;   LENGTH: 563
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-025-380-944

Query Match         100.0%;  Score 252;  DB 14;  Length 563;
Best Local Similarity 100.0%;  Pred. No. 2.1e-64;
Matches  252;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy    1 AATTGTGCCCTTGAGGAGCTGCGTCTTGTGGGGACCTCTGGGGGACCAACTCCATGCC 60
        |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  472 AATTGTGCCCTTGAGGAGCTGCGTCTTGTGGGGACCTCTGGGGGACCAACTCCATGCC 413

Qy   61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGTCAGTTGGATCATTGAGCTGCTG 120
        |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  412 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGTCAGTTGGATCATTGAGCTGCTG 353

Qy  121 GAGAAGGATGGCATGGCCTTCCAGGAGCCCTTGACCAGGGCAGC 180
        ||||||||||||||||||||||||||||||||||||||||||||
Db  352 GAGAAGGATGGCATGGCCTTCCAGGAGCCCTTGACCAGGGCAGC 293

Qy  181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCAGCCCCTACCACCCCGGCAGC 240
        |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  292 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCAGCCCCTACCACCCCGGCAGC 233

Qy  241 TGTGGCGCAGGA 252
        ||||||||||||
Db  232 TGTGGCGCAGGA 221


RESULT 4
US-09-922-217-853/c
; Sequence 853, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Lodes, Michael J.
;   APPLICANT: Secrist, Heather
;   APPLICANT: Benson, Darin R.
;   APPLICANT: Meagher, Madeleine Joy
;   APPLICANT: Stolk, John A.
;   APPLICANT: Wang, Tongtong
;   APPLICANT: Jiang, Yuqiu
;   APPLICANT: Smith, Carole Lynn
;   APPLICANT: King, Gordon E.
;   APPLICANT: Wang, Aijun
;   APPLICANT: Clapper, Jonathan D.
;   TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;   TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.471C13
;   CURRENT APPLICATION NUMBER: US/09/922,217
;   CURRENT FILING DATE: 2001-08-03
;   NUMBER OF SEQ ID NOS: 1124
```

```
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 853
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-922-217-6-853

Query Match         100.0%;  Score 252;  DB 9;  Length 626;
Best Local Similarity   100.0%;  Pred. No. 2.2e-64;
Matches 252;  Conservative  0;  Mismatches  0;  Indels  0;  Gaps  0;

Qy    1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTCGGGGGACCAACTCCATGCC 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  471 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTCGGGGGACCAACTCCATGCC 412

Qy   61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  411 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 352

Qy  121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  351 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 292

Qy  181 CCCTTTGCCCAGGAGCTGCTGGACGACGTGCTGGACGACGTGCTGGACGACGTGCTGGAC 240
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  291 CCCTTTGCCCAGGAGCTGCTGGACGACGTGCTGGACGACGTGCTGGACGACGTGCTGGAC 232

Qy  241 TGTGGGCGCAGGA 252
          |||||||||||||
Db  231 TGTGGGCGCAGGA 220


RESULT 5
US-09-833-263-853/c
; Sequence 853, Application US/09833263
; Patent No. US20020110547A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Stolk, John A.
; APPLICANT: Meagher, Madeleine J.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C12
; CURRENT APPLICATION NUMBER: US/09/833,263
; CURRENT FILING DATE: 2001-04-10
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 853
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Homo sapien
US-09-833-263-853

Query Match         100.0%;  Score 252;  DB 10;  Length 626;
Best Local Similarity   100.0%;  Pred. No. 2.2e-64;
Matches 252;  Conservative  0;  Mismatches  0;  Indels  0;  Gaps  0;

Qy    1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTCGGGGGACCAACTCCATGCC 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  471 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTCGGGGGACCAACTCCATGCC 412

Qy   61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  411 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 352

Qy  121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  351 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 292

Qy  181 CCCTTTGCCCAGGAGCTGCTGGACGACGTGCTGGACGACGTGCTGGACGACGTGCTGGAC 240
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  291 CCCTTTGCCCAGGAGCTGCTGGACGACGTGCTGGACGACGTGCTGGACGACGTGCTGGAC 232
```

```
Qy  241 TGTGGGCGCAGGA 252
          |||||||||||||
Db  231 TGTGGGCGCAGGA 220


RESULT 6
US-10-025-380-853/c
; Sequence 853, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole L.
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Skeiky, Yasir A. W.
; APPLICANT: Fanger, Gary R.
; APPLICANT: Vedvick, Thomas S.
; APPLICANT: Carter, Darrick
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C14
; CURRENT APPLICATION NUMBER: US/10/025,380
; CURRENT FILING DATE: 2001-12-19
; NUMBER OF SEQ ID NOS: 1129
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 853
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-025-380-853

Query Match         100.0%;  Score 252;  DB 14;  Length 626;
Best Local Similarity   100.0%;  Pred. No. 2.2e-64;
Matches 252;  Conservative  0;  Mismatches  0;  Indels  0;  Gaps  0;

Qy    1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTCGGGGGACCAACTCCATGCC 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  471 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTCGGGGGACCAACTCCATGCC 412

Qy   61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  411 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 352

Qy  121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  351 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 292

Qy  181 CCCTTTGCCCAGGAGCTGCTGGACGACGTGCTGGACGACGTGCTGGACGACGTGCTGGAC 240
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  291 CCCTTTGCCCAGGAGCTGCTGGACGACGTGCTGGACGACGTGCTGGACGACGTGCTGGAC 232

Qy  241 TGTGGGCGCAGGA 252
          |||||||||||||
Db  231 TGTGGGCGCAGGA 220


RESULT 7
US-10-097-340-74
; Sequence 74, Application US/10097340
; Publication No. US20030087250A1
; GENERAL INFORMATION:
; APPLICANT: John MONAHAN
; APPLICANT: Manjula GANNAVARAPU
; APPLICANT: Sebastian HOERSCH
```

; APPLICANT: Shubhangi KAMATKAR
; APPLICANT: Steve G. KOVATS
; APPLICANT: Rachel E. MEYERS
; APPLICANT: Michael MORRISEY
; APPLICANT: Peter OLANDT
; APPLICANT: Ami SEN
; APPLICANT: Peter VEIBY
; APPLICANT: Gordon B. MILLS
; APPLICANT: Robert C. BAST, Jr.
; APPLICANT: Karen LU
; APPLICANT: Rosemarie SCHMANDT
; APPLICANT: Xumei ZHAO
; APPLICANT: Karen GLATT
; TITLE OF INVENTION: Nucleic Acid Molecules and Proteins For The Identification,
; TITLE OF INVENTION: Assessment, Prevention, and Therapy of Ovarian Cancer
; FILE REFERENCE: MRI-030
; CURRENT APPLICATION NUMBER: US/10/097,340
; CURRENT FILING DATE: 2002-03-14
; PRIOR APPLICATION NUMBER: 60/276,025
; PRIOR FILING DATE: 2001-03-14
; PRIOR APPLICATION NUMBER: 60/325,149
; PRIOR FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: 60/276,026
; PRIOR FILING DATE: 2001-03-14
; PRIOR APPLICATION NUMBER: 60/324,967
; PRIOR FILING DATE: 2001/09/26
; PRIOR APPLICATION NUMBER: 60/311,732
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: 60/325,102
; PRIOR FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: 60/323,580
; PRIOR FILING DATE: 2001-09-19
; NUMBER OF SEQ ID NOS: 363
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 74
;   LENGTH: 1907
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-097-340-74

Query Match   100.0%; Score 252; DB 15; Length 1907;
Best Local Similarity   100.0%; Pred. No. 2.4e-64;
Matches   252; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

Qy   1 AATTGTGCCCTTGAGGAGCTGCGTCTTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
              ||||||||||||||||||||||||||| ||||||||||||||||||||||||||||||||||
Db   405 AATTGTGCCCTTGAGGAGCTGCGTCTGCGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 464

Qy   61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   465 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 524

Qy   121 GAGAAGGATGGCATGGCCTTCAGGAGGCCCTAGACCCAGGGCCCTTGACCAGGGCAGC 180
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   525 GAGAAGGATGGCATGGCCTTCAGGAGGCCCTAGACCCAGGGCCCTTGACCAGGGCAGC 584

Qy   181 CCCTTTGCCCAGGAGCTGCTGACGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   585 CCCTTTGCCCAGGAGCTGCTGACGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 644

Qy   241 TGTGGCGCAGGA 252
              ||||||||||||
Db   645 TGTGGCGCAGGA 656

RESULT 8
US-09-964-824A-101
; Sequence 101, Application US/09964824A
; Patent No. US20020102531A1
; GENERAL INFORMATION:
; APPLICANT: Horrigan, Stephen
; TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
; TITLE OF INVENTION: Sets

; FILE REFERENCE: 689290-73
; CURRENT APPLICATION NUMBER: US/09/964,824A
; CURRENT FILING DATE: 2001-09-27
; PRIOR APPLICATION NUMBER: US/60/236,033
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,032
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,028
; PRIOR FILING DATE: 2000-09-28
; NUMBER OF SEQ ID NOS: 583
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 101
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-964-824A-101

Query Match   100.0%; Score 252; DB 10; Length 1915;
Best Local Similarity   100.0%; Pred. No. 2.4e-64;
Matches   252; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

Qy   1 AATTGTGCCCTTGAGGAGCTGCGTCTTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
              ||||||||||||||||||||||||||| ||||||||||||||||||||||||||||||||||
Db   429 AATTGTGCCCTTGAGGAGCTGCGTCTGCGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 488

Qy   61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   489 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 548

Qy   121 GAGAAGGATGGCATGGCCTTCAGGAGGCCCTAGACCCAGGGCCCTTGACCAGGGCAGC 180
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   549 GAGAAGGATGGCATGGCCTTCAGGAGGCCCTAGACCCAGGGCCCTTGACCAGGGCAGC 608

Qy   181 CCCTTTGCCCAGGAGCTGCTGACGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   609 CCCTTTGCCCAGGAGCTGCTGACGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 668

Qy   241 TGTGGCGCAGGA 252
              ||||||||||||
Db   669 TGTGGCGCAGGA 680

RESULT 9
US-09-964-824A-563
; Sequence 563, Application US/09964824A
; Patent No. US20020102531A1
; GENERAL INFORMATION:
; APPLICANT: Horrigan, Stephen
; TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signat
; TITLE OF INVENTION: Sets
; FILE REFERENCE: 689290-73
; CURRENT APPLICATION NUMBER: US/09/964,824A
; CURRENT FILING DATE: 2001-09-27
; PRIOR APPLICATION NUMBER: US/60/236,033
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,032
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,028
; PRIOR FILING DATE: 2000-09-28
; NUMBER OF SEQ ID NOS: 583
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 563
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-964-824A-563

Query Match   100.0%; Score 252; DB 10; Length 1915;
Best Local Similarity   100.0%; Pred. No. 2.4e-64;
Matches   252; Conservative   0; Mismatches   0; Indels   0; Gaps   0;

Qy   1 AATTGTGCCCTTGAGGAGCTGCGTCTTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
              ||||||||||||||||||||||||||| ||||||||||||||||||||||||||||||||||

Db 429 AATTGTGCCCTTGAGGAGCTGCGTCTCGGTCTTTGGGCCTCTCGGGGGACCAACTCCATGCC 488
Qy 61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
Db 489 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 548
Qy 121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTGACACCCAGGGCCCTTGACCAGGGCAGC 180
Db 549 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTAGACCCAGGGCCCTTGACCAGGGCAGC 608
Qy 181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCTACCACCCCGGCAGC 240
Db 609 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCTACCACCCCGGCAGC 668
Qy 241 TGTGGCGCAGGA 252
Db 669 TGTGGCGCAGGA 680

RESULT 10
US-09-880-107-3420
; Sequence 3420, Application US/09880107
; Patent No. US2002014298lAl
; GENERAL INFORMATION:
; APPLICANT: Horne, Darci T.
; APPLICANT: Vockley, Joseph G.
; APPLICANT: Scherf, Uwe
; APPLICANT: Gene Logic, Inc.
; TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
; FILE REFERENCE: 44921-5028-WO
; CURRENT APPLICATION NUMBER: US/09/880,107
; CURRENT FILING DATE: 2001-06-14
; PRIOR APPLICATION NUMBER: US 60/211,379
; PRIOR FILING DATE: 2000-06-14
; PRIOR APPLICATION NUMBER: US 60/237,054
; PRIOR FILING DATE: 2000-10-02
; NUMBER OF SEQ ID NOS: 3950
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3420
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Genbank Accession No. US20020142981A1 U73843
US-09-880-107-3420

Query Match   100.0%;   Score 252;   DB 10;   Length 1915;
Best Local Similarity 100.0%;   Pred. No. 2.4e-64;
Matches 252;   Conservative 0;   Mismatches 0;   Indels 0;   Gaps 0;

Qy 1 AATTGTGCCCTTGAGGAGCTGCGTCTCGGTCTTTGGGCCTCTCGGGGGACCAACTCCATGCC 60
Db 429 AATTGTGCCCTTGAGGAGCTGCGTCTCGGTCTTTGGGCCTCTCGGGGGACCAACTCCATGCC 488
Qy 61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
Db 489 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 548
Qy 121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTGACACCCAGGGCCCTTGACCAGGGCAGC 180
Db 549 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTAGACCCAGGGCCCTTGACCAGGGCAGC 608
Qy 181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCTACCACCCCGGCAGC 240
Db 609 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCTACCACCCCGGCAGC 668
Qy 241 TGTGGCGCAGGA 252
Db 669 TGTGGCGCAGGA 680

RESULT 11
US-09-967-768A-192

Sequence 192, Application US/09967768A
; Patent No. US20020150877A1
; GENERAL INFORMATION:
; APPLICANT: Augustus, Meena
; TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signat
; TITLE OF INVENTION: Sets
; FILE REFERENCE: 689290-72
; CURRENT APPLICATION NUMBER: US/09/967,768A
; CURRENT FILING DATE: 2001-09-28
; PRIOR APPLICATION NUMBER: US/60/236,109
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,034
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,111
; PRIOR FILING DATE: 2000-09-28
; SOFTWARE: PatentIn version 3.0
; NUMBER OF SEQ ID NOS: 325
; SEQ ID NO 192
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-967-768A-192

Query Match   100.0%;   Score 252;   DB 10;   Length 1915;
Best Local Similarity 100.0%;   Pred. No. 2.4e-64;
Matches 252;   Conservative 0;   Mismatches 0;   Indels 0;   Gaps 0;

Qy 1 AATTGTGCCCTTGAGGAGCTGCGTCTCGGTCTTTGGGCCTCTCGGGGGACCAACTCCATGCC 60
Db 429 AATTGTGCCCTTGAGGAGCTGCGTCTCGGTCTTTGGGCCTCTCGGGGGACCAACTCCATGCC 488
Qy 61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
Db 489 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 548
Qy 121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTGACACCCAGGGCCCTTGACCAGGGCAGC 180
Db 549 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTAGACCCAGGGCCCTTGACCAGGGCAGC 608
Qy 181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCTACCACCCCGGCAGC 240
Db 609 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCTACCACCCCGGCAGC 668
Qy 241 TGTGGCGCAGGA 252
Db 669 TGTGGCGCAGGA 680

RESULT 12
US-09-922-217-1105
; Sequence 1105, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole Lynn
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C13
; CURRENT APPLICATION NUMBER: US/09/922,217
; CURRENT FILING DATE: 2001-08-03
; NUMBER OF SEQ ID NOS: 1124
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105

```
; LENGTH: 1917
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-922-217-1105

Query Match     100.0%;   Score 252; DB 9;   Length 1917;
Best Local Similarity   100.0%;   Pred. No. 2.4e-64;
Matches  252;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy     1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGGACCAACTCCATGCC 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||
Db   431 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGGACCAACTCCATGCC 490

Qy    61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTTGGATCATTGAGCTGCTG 120
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   491 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTTGGATCATTGAGCTGCTG 550

Qy   121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTAGACCCAGGGGCCCTTTGACCAGGGCAGC 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   551 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTAGACCCAGGGGCCCTTTGACCAGGGCAGC 610

Qy   181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCGGCAGC 240
           ||||||||||||||||||||||||||||||||||||||||||||||||||
Db   611 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCGGCAGC 670

Qy   241 TGTGGGCGCAGGA 252
           |||||||||||||
Db   671 TGTGGGCGCAGGA 682


RESULT 13
US-10-025-380-1105
; Sequence 1105, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole L.
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Skeiky, Yasir A. W.
; APPLICANT: Fanger, Gary R.
; APPLICANT: Vedvick, Thomas S.
; APPLICANT: Carter, Darrick
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C14
; CURRENT APPLICATION NUMBER: US/10/025,380
; CURRENT FILING DATE: 2001-12-19
; NUMBER OF SEQ ID NOS: 1129
; SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1105
; LENGTH: 1917
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-025-380-1105

Query Match     100.0%;   Score 252; DB 14;   Length 1917;
Best Local Similarity   100.0%;   Pred. No. 2.4e-64;
Matches  252;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy     1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGGACCAACTCCATGCC 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||
Db   431 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGGACCAACTCCATGCC 490

Qy    61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
```

```
Db   491 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTTGGATCATTGAGCTGCTG 550

Qy   121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTAGACCCAGGGGCCCTTTGACCAGGGCAGC 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   551 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTAGACCCAGGGGCCCTTTGACCAGGGCAGC 610

Qy   181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCGTCAGCAAGCCAGCCACCCCGGCAGC 240
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   611 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCGTCAGCAAGCCAGCCACCCCGGCAGC 670

Qy   241 TGTGGGCGCAGGA 252
           |||||||||||||
Db   671 TGTGGGCGCAGGA 682


RESULT 14
US-10-264-049-756
; Sequence 756, Application US/10264049
; Publication No. US2004005579A1
; GENERAL INFORMATION:
; APPLICANT: Birse et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
; FILE REFERENCE: PA133P1
; CURRENT APPLICATION NUMBER: US/10/264,049
; CURRENT FILING DATE: 2002-10-04
; PRIOR APPLICATION NUMBER: PCT/US01/18569
; PRIOR FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: US 60/209,467
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 4360
; SOFTWARE: Patentin Ver. 3.1
SEQ ID NO 756
; LENGTH: 1956
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-264-049-756

Query Match     100.0%;   Score 252; DB 12;   Length 1956;
Best Local Similarity   100.0%;   Pred. No. 2.4e-64;
Matches  252;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy     1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGGACCAACTCCATGCC 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||
Db   470 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGGACCAACTCCATGCC 529

Qy    61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   530 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 589

Qy   121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTTGACCAGGGGCAGC 180
           |||||||||||||||||||||||||||||||||||||||||||||||
Db   590 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTTGACCAGGGGCAGC 649

Qy   181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCGTCAGCAAGCCAGCCCCGGCAGC 240
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   650 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCGTCAGCAAGCCAGCCCCGGCAGC 709

Qy   241 TGTGGGCGCAGGA 252
           |||||||||||||
Db   710 TGTGGGCGCAGGA 721


RESULT 15
US-09-925-301-207
; Sequence 207, Application US/09925301
; Patent No. US20020052308A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
; FILE REFERENCE: PA106
; CURRENT APPLICATION NUMBER: US/09/925,301
; CURRENT FILING DATE: 2001-08-10
```

```
;    PRIOR APPLICATION NUMBER: PCT/US00/05882
;    PRIOR FILING DATE: 2000-03-08
;    PRIOR APPLICATION NUMBER: 60/124,270
;    PRIOR FILING DATE: 1999-03-12
;    NUMBER OF SEQ ID NOS: 1694
;    SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 207
;    LENGTH: 1996
;    TYPE: DNA
;    ORGANISM: Homo sapiens
US-09-925-301-207

Query Match         100.0%;   Score 252;  DB 9;  Length 1996;
Best Local Similarity 100.0%;  Pred. No. 2.4e-64;
Matches  252;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy     1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTCGGGGGACCAACTCCATGCC 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   450 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTCGGGGGACCAACTCCATGCC 509

Qy    61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   510 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 569

Qy   121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGCAGC 180
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   570 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 629

Qy   181 CCCTTTGCCCAGGAGCTGCTGACGACGGTCGCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   630 CCCTTTGCCCAGGAGCTGCTGACGACGGTCGCAGCAAGCCAGCCCCTACCACCCCGGCAGC 689

Qy   241 TGTGGGCGCAGGA 252
           |||||||||||||
Db   690 TGTGGGCGCAGGA 701

Search completed: February 13, 2004, 11:48:19
Job time : 89.8409 secs
```

GenCore version 5.1.6

Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - nucleic search, using frame_plus_p2n model

Run on: February 12, 2004, 21:34:51 ; Search time 585.395 Seconds
             (without alignments)
             2334.540 Million cell updates/sec

Title: US-08-978-217-2
Perfect score: 1980
Sequence: 1 MAATCEISNIFSNYFSAMYS........YKFGKNSSGWKEEEVLQSRN 371

Scoring table: BLOSUM62
                Xgapop 10.0 , Xgapext 0.5
                Ygapop 10.0 , Ygapext 0.5
                Fgapop 6.0 , Fgapext 7.0
                Delop   6.0 , Delext 7.0

Searched: 2449703 seqs, 1841816367 residues

Total number of hits satisfying chosen parameters: 4899406

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

Command line parameters:
-MODEL=frame+_p2n.model -DEV=xlh
-Q=/cgn2_1/USPTO_spool/US08978217/runat_10022004_133827_20514/app_query.fasta_1.1500
-DB=Published Applications NA -QFMT=fastap -SUFFIX=rnpb -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=200000000 -USER=US08978217 @CGN_1_690_@runat_10022004_133827_20514
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database :   Published Applications NA:*
          1:   /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
          2:   /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
          3:   /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
          4:   /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
          5:   /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
          6:   /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
          7:   /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
          8:   /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
          9:   /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
         10:   /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
         11:   /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
         12:   /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
         13:   /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq2:*
         14:   /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
         15:   /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
         16:   /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
         17:   /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
         18:   /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

SUMMARIES

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

Result No.		Score	% Match	Query	Match Length	DB	ID	Description
1		1980	100.0	1980	1907	15	US-10-097-340-74	Sequence 74, Appl
2		1980	100.0	1980	1915	10	US-09-964-824A-101	Sequence 101, App
3		1980	100.0	1980	1915	10	US-09-964-824A-563	Sequence 563, App
4		1980	100.0	1980	1915	10	US-09-880-107-3420	Sequence 3420, Ap
5		1980	100.0	1980	1915	9	US-09-967-768A-192	Sequence 192, App
6		1980	100.0	1980	1917	9	US-09-922-217-1105	Sequence 1105, Ap
7		1980	100.0	1980	1917	14	US-10-025-380-1105	Sequence 1105, App
8		1980	100.0	1980	1956	12	US-10-264-301-207	Sequence 756, App
9		1980	100.0	1980	1996	9	US-09-925-301-207	Sequence 207, Appl
10		1654	83.5	1654	2269	12	US-10-131-410-64	Sequence 64, Appl
11	c	1127	56.9	1127	626	9	US-09-922-217-853	Sequence 853, App
12	c	1127	56.9	1127	626	10	US-09-833-263-853	Sequence 853, App
13	c	1127	56.9	1127	626	14	US-10-025-380-853	Sequence 853, App
14	c	1011	51.1	1011	563	9	US-09-922-217-944	Sequence 944, App
15	c	1011	51.1	1011	563	14	US-10-025-380-944	Sequence 944, App
16	c	1011	51.1	1011	563	14	US-09-833-263-944	Sequence 944, App
17		903	45.6	903	502	10	US-09-604-287A-282	Sequence 282, App
18		903	45.6	903	502	10	US-09-339-338-282	Sequence 282, App
19		903	45.6	903	502	11	US-09-551-621-282	Sequence 282, App
20		903	45.6	903	502	11	US-10-124-805-282	Sequence 282, App
21		903	45.6	903	502	13	US-10-007-805-282	Sequence 282, App
22		903	45.6	903	502	14	US-10-076-622-282	Sequence 282, App
23	c	822	41.5	822	499	15	US-09-998-598-2290	Sequence 2290, App
24	c	652	32.9	652	437	10	US-09-998-598-2216	Sequence 2216, Ap
25		618	31.2	618	355	10	US-09-867-701-4818	Sequence 4818, Ap
26		558	28.2	558	1429	10	US-09-764-864-320	Sequence 320, App
27		556.5	28.1	556.5	1426	9	US-09-925-297-309	Sequence 309, App
28		556.5	28.1	556.5	1426	15	US-10-106-698-935	Sequence 935, App
29		554.5	28.0	554.5	1435	12	US-10-292-798-1601	Sequence 1601, Ap
30		554.5	28.0	554.5	1435	13	US-10-017-161-1953	Sequence 1953, Ap
31		519.5	26.2	519.5	852	9	US-09-759-143-44	Sequence 44, Appl
32		519.5	26.2	519.5	852	9	US-09-780-669-44	Sequence 44, Appl
33		519.5	26.2	519.5	852	9	US-09-030-606-44	Sequence 44, Appl
34		519.5	26.2	519.5	852	9	US-09-822-827-44	Sequence 44, Appl
35		519.5	26.2	519.5	852	9	US-09-115-453-44	Sequence 44, Appl
36		519.5	26.2	519.5	852	10	US-09-232-880-44	Sequence 44, Appl
37		519.5	26.2	519.5	852	10	US-09-895-793-44	Sequence 44, Appl
38		519.5	26.2	519.5	852	10	US-09-895-814-44	Sequence 44, Appl
39		519.5	26.2	519.5	852	13	US-10-144-678A-44	Sequence 44, Appl
40		519.5	26.2	519.5	852	13	US-10-294-025-44	Sequence 44, Appl
41		519.5	26.2	519.5	852	14	US-10-012-896-44	Sequence 44, Appl
42		519.5	26.2	519.5	852	15	US-10-010-940-44	Sequence 44, Appl
43		442	22.3	442	5045	15	US-09-974-298-12	Sequence 12, Appl
44		435.5	22.0	435.5	275	15	US-10-060-036-3261	Sequence 3261, A
45	c	435	22.0	435	440	10	US-09-960-352-11873	Sequence 11873, A

ALIGNMENTS

RESULT 1
US-10-097-340-74
; Sequence 74, Application US/10097340
; Publication No. US20030087250A1
GENERAL INFORMATION:
  APPLICANT: John MONAHAN
  APPLICANT: Manjula GANNAVARAPU
  APPLICANT: Sebastian HOERSCH
  APPLICANT: Shubhangi KAMATKAR
  APPLICANT: Steve G. KOVATS
  APPLICANT: Rachael E. MEYERS
  APPLICANT: Michael MORRISEY
  APPLICANT: Peter OLANDT
  APPLICANT: Ami SEN
  APPLICANT: Peter VEIBY
  APPLICANT: Gordon B. MILLS
  APPLICANT: Robert C. BAST, Jr.
  APPLICANT: Karen LU
  APPLICANT: Rosemarie SCHMANDT
  APPLICANT: Xumei ZHAO
  APPLICANT: Karen GLATT
  TITLE OF INVENTION: Nucleic Acid Molecules and Proteins For The Identification,
  TITLE OF INVENTION: Assessment, Prevention, and Therapy of Ovarian Cancer
  FILE REFERENCE: MRI-030

```
; CURRENT APPLICATION NUMBER: US/10/097,340
; CURRENT FILING DATE: 2002-03-14
; PRIOR APPLICATION NUMBER: 60/276,025
; PRIOR FILING DATE: 2001-03-14
; PRIOR APPLICATION NUMBER: 60/325,149
; PRIOR FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: 60/276,026
; PRIOR FILING DATE: 2001-03-14
; PRIOR APPLICATION NUMBER: 60/324,967
; PRIOR FILING DATE: 2001/09/26
; PRIOR APPLICATION NUMBER: 60/311,732
; PRIOR FILING DATE: 2001/09/26
; PRIOR APPLICATION NUMBER: 60/325,102
; PRIOR FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: 60/323,580
; PRIOR FILING DATE: 2001-08-10
; PRIOR FILING DATE: 2001-09-19
; NUMBER OF SEQ ID NOS: 363
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 74
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-097-340-74

Alignment Scores:
Pred. No.:              8.64e-212    Length:          1907
Score:                  1980.00      Matches:         371
Percent Similarity:     100.00%      Conservative:    0
Best Local Similarity:  100.00%      Mismatches:      0
Query Match:            100.00%      Indels:          0
DB:                     15           Gaps:            0

US-08-978-217-2 (1-371) x US-10-097-340-74 (1-1907)

Qy    1  MetAlaAlaThrCysGluIleSerAsnIlePheSerAlaMetTyrSer  20
            ||||||||||||||||||||||||||||||||||||||||||||||||
Db   96  ATGGCTGCAACCTGCGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGGATGTACAGC  155

Qy   21  SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspAspLeu  40
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  156  TCGGAGGACTCCACCCTGGCTCGTTCCCCCGCTGCCACCTTGGGCCGATGACTTG  215

Qy   41  ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGluLysAlaSerTrpLeu  60
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  216  GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG  275

Qy   61  GlyGluGlnProGlnPheTrpSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal  80
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  276  GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG  335

Qy   81  GluLysAsnLysTyrAspPheSerAlaIleAspAspPheSerArgCysAspMetAspGlyAla  100
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  336  GAGAAGAACAAGTACGACGCAAGCCCATTGACTTCTCACGATCGTGACATGGATGGCGCC  395

Qy  101  ThrLeuCysAsnCysAlaLeuGluLeuArgLeuValPheGlyProLeuGlyAspGln  120
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  396  ACCCTGTGCAATTGTGCCCTTGAGCAGCTGCGTCCTTGCGTCTTTGGCCTTCTGGGGGACCAA  455

Qy  121  LeuHisAlaGlnLeuLeuArgAspLeuThrSerSerAspGluLeuSerTrpIleIle  140
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  456  CTCCATGCCCAGCTGCGAGACCTCACTTCAGCTCTTCGATGAGCTCAGTTGGATCATT  515

Qy  141  GluLeuLeuGluLysAspGlyMetAlaGluAlaPheGlnGluLeuAlaLeuAspProGlyProPheAsp  160
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  516  GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTTGAC  575

Qy  161  GlnGlySerProPheAlaGlnGlnLeuLeuAspAspGlyGlnGlnAlaSerProTyrHis  180
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  576  CAGGGCAGCCCCTTTGCCCAGCAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC  635

Qy  181  ProGlySerCysGlyValAlaGlyAlaProSerProGlySerAspValSerAspThrAlaGly  200
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  636  CCCGGCAGCTGTGGGGCAGGAGCCCCCTCCCCTGGCAGTCTGACGTCTCCAGACACGGGG  695

Qy  201  ThrGlyAlaSerArgSerHisSerAspSerGlyGlySerAspValAspLeuAsp  220
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  696  ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT  755

Qy  221  ProThrAspGlyLysLeuPheProSerArgGlyPheArgAspCysLysLysGlyAspPro  240
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  756  CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTCGTGACTGCAAGAAGGGGGGATCCC  815

Qy  241  LysHisGlyLysArgArgGlyArgProArgLysSerLysGluTyrTrpAspCys  260
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  816  AAGCACGGAAGCGGAAACAGAGGCCGGAAAAGTGAGCAAGAAGAGTACTGGGACTGT  875

Qy  261  LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGlnPheIleArg  280
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  876  CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG  935

Qy  281  AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu  300
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  936  GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA  995

Qy  301  GlyValPheLysPheSerGlyLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys  320
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  996  GGCGTCTTCAAGTTCTCTGGCGTCCGAGCGGTGGCCCAACTATGGGGCCAAAAGAAAAAG  1055

Qy  321  AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu  340
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1056  AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG  1115

Qy  341  IleLeuGluArgValAspGlyArgArgLeuValPheLysPheGlyLysAsnSerSerGly  360
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1116  ATCCTGGAACGGGTGGATGGCCGGCGACTGGTCTTCAAGTTTGGCAAAAACTCAAGCGGC  1175

Qy  361  TrpLysGluGluGluGlnValLeuValGlnSerArgAsn  371
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1176  TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC  1208


RESULT 2
US-09-964-824A-101
; Sequence 101, Application US/09964824A
; Patent No. US2002102531A1
; GENERAL INFORMATION:
;  APPLICANT: Horrigan, Stephen
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signat
;  TITLE OF INVENTION: Sets
;  FILE REFERENCE: 68Q290-73
;  CURRENT APPLICATION NUMBER: US/09/964,824A
;  CURRENT FILING DATE: 2001-09-27
;  PRIOR APPLICATION NUMBER: US/60/236,033
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,032
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,028
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 583
;  SOFTWARE: Patentin version 3.0
;  SEQ ID NO 101
;  LENGTH: 1915
;  TYPE: DNA
;  ORGANISM: Homo sapiens
US-09-964-824A-101

Alignment Scores:
Pred. No.:              8.69e-212    Length:          1915
Score:                  1980.00      Matches:         371
Percent Similarity:     100.00%      Conservative:    0
Best Local Similarity:  100.00%      Mismatches:      0
Query Match:            100.00%      Indels:          0
DB:                     10           Gaps:            0

US-08-978-217-2 (1-371) x US-09-964-824A-101 (1-1915)

Qy    1  MetAlaAlaThrCysGluIleSerAsnIlePheSerAlaMetTyrSer  20
```

```
Db   1200 TGGAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1232

RESULT 3
US-09-964-824A-563
; Sequence 563, Application US/09964824A
; Patent No. US2002010253A1A1
; GENERAL INFORMATION:
;   APPLICANT: Horrigan, Stephen
;   TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;   TITLE OF INVENTION: Sets
;   FILE REFERENCE: 689290-73
;   CURRENT APPLICATION NUMBER: US/09/964,824A
;   CURRENT FILING DATE: 2001-09-27
;   PRIOR APPLICATION NUMBER: US/60/236,033
;   PRIOR FILING DATE: 2000-09-28
;   PRIOR APPLICATION NUMBER: US/60/236,032
;   PRIOR FILING DATE: 2000-09-28
;   PRIOR APPLICATION NUMBER: US/60/236,028
;   PRIOR FILING DATE: 2000-09-28
;   NUMBER OF SEQ ID NOS: 583
;   SOFTWARE: Patentin version 3.0
; SEQ ID NO 563
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-964-824A-563

Alignment Scores:
Pred. No.:
Score:                    1980.00        Length:         1915
Percent Similarity:       100.00%        Matches:         371
Best Local Similarity:    100.00%        Conservative:      0
Query Match:              10             Mismatches:        0
DB:                       8.69e-212      Indels:            0
                                         Gaps:              0

US-08-978-217-2 (1-371) x US-09-964-824A-563 (1-1915)

Qy     1 MetAlaAlaThrCysGluIleSerAsnIlePheSerAlaMetTyrSer 20
         |||||||||||||||||||||||||||||||||||||||||||||||
Db   120 ATGGCTGCAACCTGTGAGATTAGCAACATTTTAGCAACTACTTCAGTGCCGATGTACAGC 179

Qy    21 SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspLeu 40
         ||||||||||||||||||||||||||||||||||||||||||||||||
Db   180 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCCACTTTTGGGGCCGATGACTTG 239

Qy    41 ValLeuThrLeuSerAsnProGlnMetSerLeuGlyThrGluLysAlaSerTrpLeu 60
         ||||||||||||||||||||||||||||||||||||||||||||||||
Db   240 GTACTGACCCTGAGCAACCCCAGATGTCATTGAGGGTACAGAGAAGGCCAGCTGGTTG 299

Qy    61 GlyGluGlnProGlnPheTrpSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal 80
         |||||||||||||||||||||||||||||||||||||||||||||||||
Db   300 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 359

Qy    81 GluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgCysAspMetAspGlyAla 100
         |||||||||||||||||||||||||||||||||||||||||||||||||
Db   360 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 419

Qy   101 ThrLeuCysAsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGln 120
         |||||||||||||||||||||||||||||||||||||||||||||||||
Db   420 ACCCTGTGCAATTGTGCCCTGGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 479

Qy   121 LeuHisAlaGlnLeuAspLeuArgSerSerAspGluLeuSerTrpIleIle 140
         |||||||||||||||||||||||||||||||||||
Db   480 CTCCATGCCCAGCTGGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 539

Qy   141 GluLeuLeuGlyLysAspGlyMetAlaPheGlnGluLeuLeuAspProGlyProPheAsp 160
         |||||||||||||||||||||||||||||||||||||||||||||||||
Db   540 GAGCTGCTGGGAAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 599

Qy   161 GlnGlySerProPheAlaGlnGlyLeuLeuAspAspGlyGlnGlnAlaSerProTyrHis 180
         |||||||||||||||||||||||||||||||||||||||||||||||||
Db   600 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 659

Qy   181 ProGlySerCysGlyAlaGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGly 200
         |||||||||||||||||||||||||||||||||||||||||||||||||
Db   660 CCCGGCAGTGTGGCGCGAGGAGCCCCTCCCCTGGCAGCTCGCGTCTCCACCGCAGGG 719

Qy   201 ThrGlyAlaSerArgSerHisSerSerAspSerValAspSerLeuAsp 220
         ||||||||||||||||||||||||||||||||||||||||||||
Db   720 ACTGGTGCTTCTCGGAGCTCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 779

Qy   221 ProThrAspGlyLysLeuProPheProSerArgGlyPheArgAspCysLysLysLysAspPro 240
         |||||||||||||||||||||||||||||||||||||||||||||||
Db   780 CCCACTGATGGCAAGCTCCTTCCCCAGCGATGGTTTCGTGACTGCAAGAAGAAGGGGATCCC 839

Qy   241 LysHisGlyLysLysArgLysArgProArgLysLeuSerLysSerGluTyrTrpAspCys 260
         ||||||||||||||||||||||||||||||||||||||||||||||
Db   840 AAGCACGGGAAGCGGAAACGGCGGCCGCGAAAGCTGAGCAAGAGTACTGGGACTGT 899

Qy   261 LeuGluGlyLysLysSerLysLysSerHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 280
         |||||||||||||||||||||||||||||||||||||||||||||||
Db   900 CTCGAGGGCAAGAAGAGCAAGAAGAGCCACGCACCCCACCGTGGGAGTTCATCCGG 959

Qy   281 AspIleLeuIleHisProGluLeuHisProLeuLeuMetLysTrpGluAsnArgHisGlu 300
         |||||||||||||||||||||||||||||||||||||||||||||||||
Db   960 GACATCCTCATCCACCCGGAGCTCCACCCGCTCCTCATGAAGTGGGAGAATCGGCATGAA 1019

Qy   301 GlyValPheLysPheLeuArgSerGluLeuAlaValAlaGlnLeuLysGlnLysLeuLysLys 320
         |||||||||||||||||||||||||||||||||||||||||||||||
Db  1020 GGGGTCTTCAAGTTCCTGCGCTCCGAGCTGGCCGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1079

Qy   321 AsnSerAsnMetThrTyrGluLysLeuSerLeuLysSerArgAlaMetArgTyrTyrArgGlu 340
         |||||||||||||||||||||||||||||||||||||||||||||||
Db  1080 AACAGCAACATGACCTACGAGAAGCTGAGCCTGAAGTCACGGGCTATGAGGTACTACAAAACGGGAG 1139

Qy   341 IleLeuGluArgValAlaAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 360
         |||||||||||||||||||||||||||||||||||||||||||||||
Db  1140 ATCCTGGAACGGGTGGATGGCCGGCGGCTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1199

Qy   361 TrpLysGluGluGlnSerSerArgAsn 371
         |||||||||||||||
```

```
DB:                    10          Gaps:    0

US-08-978-217-2 (1-1915)

US-09-880-107-3420 (1-371) x US-09-880-107-3420 (1-1915)

Qy    1 MetAlaAlaThrCysLysGluIleSerAsnIlePheSerAlaMetTyrSer              20
Db  120 ATGGCTGCAACCTGCAAGGAATTAGCAACATTTTAGCAACTACTTCAGTGCGATGTACAGC  179

Qy   21 SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyValAlaAspLeu    40
Db  180 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCGTGCCGCCACCTTTGGGGCCGATGACTTG   239

Qy   41 ValLeuThrLeuSerAsnProGlnMetSerGluGlyThrGlyLeuLysAlaSerTrpLeu    60
Db  240 GTACTGACCCTGAGCAACCCCAGATGTCATTGGAGGGGTACAGAGAAGGCCAGCTGGTTG   299

Qy   61 GlyGluGlnProGlnPheTrpSerLysThrGlnLeuAspTrpIleSerTyrGlnVal      80
Db  300 GGGGAACAGCCCCAGTTCTGGTCAAGACGCAGTTTCTGGACTGGATCAGCTACCAAGTG   359

Qy   81 GluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgGlyAspMetAspGlyAla   100
Db  360 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC   419

Qy  101 ThrLeuCysAsnCysAlaLeuGluGluLeuValPheGlyValPheProLeuGlyAspGln   120
Db  420 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGGTCTTTGGCGTCTCGGGGACCAA         479

Qy  121 LeuHisAlaGlnLeuArgAspLeuThrSerSerAspLeuSerTrpIleIle            140
Db  480 CTCCATGCACAGCTGAGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT   539

Qy  141 GluLeuGluLysAspGlyMetAlaPheGlnLeuAlaLeuAspProGlyProPheAsp      160
Db  540 GAGCTGTCTGAGAAGGATGGCATGGCCTTCCAGGAGGCCCCTAGACCCCAGGGCCCCTTTGAC   599

Qy  161 GlnGlySerProPheAlaGlnGlnLeuLeuLeuAspAspAspGlyGlnGlnAlaSerProTyrHis  180
Db  600 CAGGGCAGCCCCTTTGCCCAGCAGGAGCTGCTGGACGACGTCAGCAAGCCAGCCCCTACCAC      659

Qy  181 ProGlySerCysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGly   200
Db  660 CCCGGCAGCTGTGGCGCGGCAGGAGCCCCTCCCCTGGCAGCTGCGACGTCTTCCACCGCAGGG   719

Qy  201 ThrGlyAlaSerArgSerHisSerSerGlyGlySerAspAspValAspLeuAsp         220
Db  720 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT   779

Qy  221 ProThrAspGlyLysLysLysProGlyPheLeuArgGlyPheGluArgAspCysLysLysGlyAspPro  240
Db  780 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC       839

Qy  241 LysHisGlyLysLysArgGlyLysArgProArgLysLysSerLysGluTyrTrpAspTrpCys   260
Db  840 AAGCACGGGCAAGAAGCGGGAAACAGAGGCCGGCCCCGAAAGTGAGCAAAGAGTACTGGGACTGT   899

Qy  261 LeuGluLeuGlyLysLysSerLysSerHisAlaProArgGlyThrHisLeuTrpGluPheIleArg   280
Db  900 CTCGAGGGCAAGAAGAGCAAGAGCCACGCGCCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG    959

Qy  281 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu    300
Db  960 GACATCCTCATCCACCCCGAGCTCAACGAGGGGCCTCATGAAGTGGGAGAAATCGGCATGAA    1019

Qy  301 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys   320
Db 1020 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCAACTATGGGGCCAAAGAGAAAAAG   1079

Qy  321 AsnSerAsnMetThrTyrGluLysTyrGluLysTyrTyrLysTyrLysArgGlu        340
Db 1080 AACAGCAACATGACCTACGAGAAGTACGATGAGAAGTACTACTACAAACGGGAG         1139

Qy  341 IleLeuGluArgValAspGlyArgLeuValTyrLysPheGlyLysAsnSerSerGly     360
Db 1140 ATCCTGGAACGCGGTGGATGGGCGGCTGGTCTACAAGTTTGGCAAAAACTCAAGCGGC     1199

Qy  361 TrpLysGluGluValLeuGluGlnSerArgAsn                              371
Db 1200 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC                             1232
```

RESULT 4
US-09-880-107-3420
; Sequence 3420, Application US/09880107
; Patent No. US2002014298 1A1
; GENERAL INFORMATION:
; APPLICANT: Horne, Darci T.
; APPLICANT: Vockley, Joseph G.
; APPLICANT: Scherf, Uwe
; APPLICANT: Gene Logic, Inc.
; TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
; FILE REFERENCE: 44921-5028-WO
; CURRENT APPLICATION NUMBER: US/09/880,107
; CURRENT FILING DATE: 2001-06-14
; PRIOR APPLICATION NUMBER: US 60/211,379
; PRIOR FILING DATE: 2000-06-14
; PRIOR APPLICATION NUMBER: US 60/237,054
; PRIOR FILING DATE: 2000-10-02
; NUMBER OF SEQ ID NOS: 3950
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3420
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Genbank Accession No. US2002014298 1A1 U73843
US-09-880-107-3420

Alignment Scores:
Pred. No.:   8.69e-212
Score: 1980.00   Length: 1915
Percent Similarity: 100.00%   Matches: 371
Best Local Similarity: 100.00%   Conservative: 0
Query Match: 100.00%   Mismatches: 0
                                        Indels: 0

Db   1140 ATCCTGGAACGGGTGGATGCCGGCGACTCGTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1199
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy   361 TrpLysGluGluValGlnLeuGlnSerArgAsn 371
Db   1200 TGGAAGGAGGAGGAGGTTCTCCAGAGTCGGAAC 1232

RESULT 5
US-09-967-768A-192
; Sequence 192, Application US/09967768A
; Patent No. US2002015087A1
; GENERAL INFORMATION:
; APPLICANT: Augustus, Meena
; TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
; TITLE OF INVENTION: Sets
; FILE REFERENCE: 689290-72
; CURRENT APPLICATION NUMBER: US/09/967,768A
; CURRENT FILING DATE: 2001-09-28
; PRIOR APPLICATION NUMBER: US/60/236,109
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,034
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,111
; PRIOR FILING DATE: 2000-09-28
; NUMBER OF SEQ ID NOS: 325
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 192
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-967-768A-192

Alignment Scores:
Pred. No.:   8.69e-212   Length: 1915
Score: 1980.00   Matches: 371
Percent Similarity: 100.00%   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 100.00%   Indels: 0
DB: 10   Gaps: 0

US-08-978-217-2 (1-371) x US-09-967-768A-192 (1-1915)

Qy   1 MetAlaAlaThrCysGluIleSerAsnIlePheSerAlaMetTyrSer 20
Db   120 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 179

Qy   21 SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspAspLeu 40
Db   180 TCGGAGGACTCCACCCTGGCCTCTGTCCCCCGTGCCGCCACCTTTGGGGCCGATGACTTG 239

Qy   41 ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGluLysGlyAlaSerTrpLeu 60
Db   240 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGGAGGGTACAGAGAAGGCCAGCTGGTTG 299

Qy   61 GlyGluGlnProGlnPheTrpProSerLysThrGlnPheTrpIleSerTyrGlnVal 80
Db   300 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 359

Qy   81 GluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgCysAspMetAspGlyAla 100
Db   360 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCCACGATGTGACATGGATGGCGCC 419

Qy   101 ThrLeuCysAsnCysAlaLeuGluGlyLeuArgLeuValPheGlyValProLeuGlyLysAspGln 120
Db   420 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGACCAA 479

Qy   121 LeuHisAlaGlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIle 140
Db   480 CTCCATGCCCAGCTCGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 539

Qy   141 GluLeuLeuGluLysAspGlyMetAlaPheGlnLysAlaLeuAspProGlyProPheAsp 160
Db   540 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGAAGGCCCTAGACCCAGGGCCCTTTGAC 599

Db   161 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHis 180
Db   600 CAGGGCAGCCCATTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 659

Qy   181 ProGlySerCysGlyAlaGlyAlaAlaProSerGlySerSerAspValSerThrAlaGly 200
Db   660 CCCGGCAGCTGTGGCGCAGGAGCCGCCCCCTCCGGCAGCTCTGACGTCTCCACGGCAGGG 719

Qy   201 ThrGlyAlaSerArgSerHisSerSerSerGlyGlySerAspValSerAspLeuAsp 220
Db   720 ACTGGTGCTTCTCGGAGCCACTCCTCAGCATCCGGTGGAAGTGACGTGGACCTCGGAT 779

Qy   221 ProThrAspGlyLysLeuProSerProAspGlyPheArgAspCysLysLysGlyAspPro 240
Db   780 CCCACTGATGGCAAGCTCTTCCCAGCCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 839

Qy   241 LysHisGlyLysLysArgGlyArgAspGlyLysLeuSerLysGluLuTyrTrpAspCys 260
Db   840 AAGCACGGGAAGCGGGAAACGAACGGCCGGCCGCCCCGAAAAGTGAGCAAAGAGTACTGGGACTGT 899

Qy   261 LeuGluGlyLysLysGluSerLysHisAlaProLysArgGlyThrHisLeuTrpPheIleArg 280
Db   900 CTCGAGGGCAAGAAGGAGAAGCAGCACGCGCCCAAGAGGCACCACCTGTGGAGTTCATCCGG 959

Qy   281 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 300
Db   960 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1019

Qy   301 GlyValPheLysPheLeuArgSerGluAlaAlaAlaGlnLeuTrpLeuTyrGlyGlnLysLysLysLys 320
Db   1020 GGGCTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1079

Qy   321 AsnSerAsnMetThrTyrGlyLysSerLeuSerArgAlaMetArgTyrTyrLysTyrGlu 340
Db   1080 AACAGCAACATGACCTACGGAGAGAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1139

Qy   341 IleLeuGluArgValAspArgArgLeuValTyrArgPheGlyLysLysAsnSerGly 360
Db   1140 ATCCTGGAACGGGTGGATGCCGGCGACTCGTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1199

Qy   361 TrpLysGluGluValGlnLeuGlnSerArgAsn 371
Db   1200 TGGAAGGAGGAGGAGGTTCTCCAGAGTCGGAAC 1232

RESULT 6
US-09-922-217-1105
; Sequence 1105, Application US/09922217
; Patent No. US2002007641AA1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole Lynn
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C13
; CURRENT APPLICATION NUMBER: US/09/922,217
; CURRENT FILING DATE: 2001-08-03
; NUMBER OF SEQ ID NOS: 1124
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
; LENGTH: 1917
; TYPE: DNA
; ORGANISM: Homo sapiens

US-09-922-217-1105

Alignment Scores:)
Pred. No.:   1917
Score: 8.71e-212
Percent Similarity: 1980.00
Best Local Similarity: 100.00%
Query Match: 100.00%
DB: 100.00%

US-08-978-217-2 (1-371) x US-09-922-217-1105 (1-1917)

Qy   1 MetAlaAlaThrCysGluIleSerAsnIlePheSerAlaMetTyrSer 20
         ||||||||||||||||||||||||||||||||||||||||||||||||
Db   122 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCCATGTACAGC 181

Qy   21 SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspAspLeu 40
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   182 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 241

Qy   41 ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGlyLysAlaSerTrpLeu 60
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   242 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 301

Qy   61 GlyGluGlnProGlnPheTrpSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal 80
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   302 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGTTACCAAGTG 361

Qy   81 GluLysAsnLysTyrArgAspAlaLeuAspPheSerArgCysAspAspMetAspGlyAla 100
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   362 GAGAAGAACAAGTACCGAGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 421

Qy   101 ThrLeuCysAsnCysAlaLeuGluGluLeuArgLeuValPheGlyValProGlyAspGln 120
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   422 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGGCCTCTGGGGACCAA 481

Qy   121 LeuHisAlaGlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIle 140
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   482 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 541

Qy   141 GluLeuGluGlyLysAspGlyMetAlaPheGlnAlaLeuAspAspProGlyProPheAsp 160
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   542 GAGCTGGTGGAGAAGGATGGCATGGCCTTCCAGGAGCCCTAGACCCAGGGCCCTTTGAC 601

Qy   161 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHis 180
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   602 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 661

Qy   181 ProGlySerCysGlyAlaGlyAlaProSerProGlySerSerAspSerValSerThrAlaGly 200
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   662 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 721

Qy   201 ThrGlyAlaSerArgSerSerHisSerSerArgAspGlySerAspValGlySerAspLeuAsp 220
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   722 ACTGGTGCTTCTCGGAGCTCCCACTCCTCCAGACTCCGGTGAAGTGACGTGGACCTGGAT 781

Qy   221 ProThrAspGlyLysLeuPheProSerArgAspGlyPheArgAspCysLysLysGlyLysAspPro 240
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   782 CCCACTGATGGCAAGCTCTTCCCCAGCAGGGATGGTTTCCGTGACTGCAAGAAGGGGATCCC 841

Qy   241 LysHisHisLysArgLysLysGlyArgProArgLysLeuSerLysLysGluThrTyrTrpAspCys 260
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   842 AAGCACCGGAAGCGGAAACGGAAAAAGGGCCCGAAAGAGTACTGGGACTGT 901

Qy   261 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuUTrpGlnPheIleGluArg 280
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   902 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTTTGGGAGTTCATCCGG 961

Qy   281 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 300
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   962 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1021

Qy   301 GlyValPheLysPheLeuArgSerGluAlaValAlaAlaGlnLeuTrpGlnLysLysLys 320

Db 1022 GGGTCTTCAAGTTCCTGCGGTCCGAGGCTGTGGCCGCCCAACTATGGGCCAAAGAAAAAG 1081
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy   321 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 340
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1082 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1141

Qy   341 IleLeuGluArgValAspGlyArgLeuValTyrLysPheGlyLysAsnSerSerGly 360
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1142 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1201

Qy   361 TrpLysGluGluGlnValLeuGlnSerArgAsn 371
         |||||||||||||||||||||||||||||||||
Db 1202 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1234

RESULT 7
US-10-025-380-1105
; Sequence 1105, Application US/10025380
; Publication No. US2002018291A1
GENERAL INFORMATION:
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Lodes, Michael J.
;   APPLICANT: Secrist, Heather
;   APPLICANT: Benson, Darin R.
;   APPLICANT: Meagher, Madeleine Joy
;   APPLICANT: Stolk, John A.
;   APPLICANT: Wang, Tongtong
;   APPLICANT: Jiang, Yuqiu
;   APPLICANT: Smith, Carole L.
;   APPLICANT: King, Gordon E.
;   APPLICANT: Wang, Aijun
;   APPLICANT: Clapper, Jonathan D.
;   APPLICANT: Skeiky, Yasir A. W.
;   APPLICANT: Fanger, Gary R.
;   APPLICANT: Vedvick, Thomas S.
;   APPLICANT: Carter, Darrick
;   TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;   TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.471C14
;   CURRENT APPLICATION NUMBER: US/10/025,380
;   CURRENT FILING DATE: 2001-12-19
;   NUMBER OF SEQ ID NOS: 1129
;   SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1105
;   LENGTH: 1917
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-025-380-1105

Alignment Scores:
Pred. No.:   1917
Score: 8.71e-212
Percent Similarity: 1980.00   Matches: 371
Best Local Similarity: 100.00%   Conservative: 0
Query Match: 100.00%   Mismatches: 0
DB: 14   Indels: 0
                                                  Gaps: 0

US-08-978-217-2 (1-371) x US-10-025-380-1105 (1-1917)

Qy   1 MetAlaAlaThrCysGluIleSerAsnIlePheSerAlaMetTyrSer 20
         ||||||||||||||||||||||||||||||||||||||||||||||||
Db   122 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCCATGTACAGC 181

Qy   21 SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspAspLeu 40
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   182 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 241

Qy   41 ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGlyLysAlaSerTrpLeu 60
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   242 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 301

Qy   61 GlyGluGlnProGlnPheTrpSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal 80

```
;  PRIOR FILING DATE: 2001-06-07
;  PRIOR APPLICATION NUMBER: US 60/209,467
;  PRIOR FILING DATE: 2000-06-07
;  NUMBER OF SEQ ID NOS: 4360
;  SOFTWARE: PatentIn Ver. 3.1
SEQ ID NO 756
;  LENGTH: 1956
;  TYPE: DNA
;  ORGANISM: Homo sapiens
US-10-264-049-756

Alignment Scores:
Pred. No.:
Score:                    8.95e-212        Length:        1956
Percent Similarity:       100.00%          Matches:        371
Best Local Similarity:    100.00%          Conservative:     0
Query Match:              100.00%          Mismatches:       0
DB:                                        Indels:           0
                                           Gaps:             0

US-08-978-217-2 (1-371) x US-10-264-049-756 (1-1956)
```

```
Qy     1 MetAlaAlaThrCysGluIleSerAsnIlePheSerAlaMetTyrSer               20
Db   161 ATGGCTGCAACCTGTGAGATTAGCAACATTTTAGCACACTACTTCAGTGCGATGTACAGC 220

Qy    21 SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspAspLeu  40
Db   221 TCGGAGGACTCCACCCTGGCCTCTGTCCCCCCTGCCGCCACCTTTGGGGCCGATGACTTG 280

Qy    41 ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGluLysAlaSerTrpLeu  60
Db   281 GTACTGACCCTGAGCAACCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 340

Qy    61 GlyGluGlnProGlnPheTrpProSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal  80
Db   341 GGGGAACAGCCCCAGTTCTGGCCAAGAACCCAGGTTCTGGACTGGATCAGCTACCAAGTG 400

Qy    81 GluLysAsnLysTyrAspAlaSerAlaIleAlaAspPheSerArgCysAspMetAspGlyAla 100
Db   401 GAGAAGAACAAGTACGACGCAAGCGCCATTGCAGACTTCTCACGATGTGACATGGATGGCGCC 460

Qy   101 ThrLeuCysAsnCysAlaLeuGluGluLeuArgAspValPheGlyValPheGlyGlnAsp 120
Db   461 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGGCCTTCATCGAA 520

Qy   121 LeuHisAlaGlnLeuArgAspLeuThrSerSerSerAspGlnGluAlaPheGlnTrpIleIle 140
Db   521 CTCCATGCCCAGCTGCGAGACCTCACTTCAGCTCTTCTGATGAGCTCAGTTGGATCATT 580

Qy   141 GluLeuGluLysGlyAspGlyHisMetAlaLeuAlaPheGlnLysLysAspProPheAsp 160
Db   581 GAGCTGCTGGAGAAGGGTGATGGCCATATGGCCCTGGCCTTCCAGAAGAAAGACCCCTTTGAC 640

Qy   161 GlnGlyGlySerProAlaGlnGluLeuGluLeuGlyAlaProSerGlySerSerAspValSerThrArgHis 180
Db   641 CAGGGCGGCAGCCCCGCTTTGGCCCAGGAGCTGGAGCTCGGCGCACCGTCAGCAGCCAGCGACGTCTCCACC 700

Qy   181 ProGlySerCysGlyAlaGlyValAlaProSerGlyAlaProSerSerSerAspValSerThrArgAsn 200
Db   701 CCCGGCAGCTGTGGCGCAGGCGTGGCCCCCTCCGGTGCCCGGAGCTCCCACTCTCAGACTCCGGAGTCGGC 760

Qy   201 ThrGlyAlaSerArgSerHisSerSerSerHisSerSerGlyAspValAspLeuAsp 220
Db   761 ACTGGTGCTTCTCGGAGCTCCCACTCTCAGACTCCGGAGTCGGAAGTGACGTGGACCTGGAT 820

Qy   221 ProThrAspGlyLysPheProSerAspAspGlyPheArgAspCysLysLysLysAspPro 240
Db   821 CCCACTGATGGCAAGTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGAAGGGGGATCCC 880

Qy   241 LysHisGlyLysArgGlyArgProArgLysLeuSerGluLysTrpAspCys 260
Db   881 AAGCACGGGAAGCGGGAACGAGGGCGCCCGCCAAAGCTGAGCAAAGACTACTGGGACTGT 940
```

```
Db   302 GGGGAACAGCCCCAGTTCTGGCCAAGAACCCAGGTTCTGGACTGGATCAGCTACCAAGTG 361

Qy    81 GluLysAsnLysTyrAspAlaSerAlaIleAlaAspPheSerArgMetAlaGlyAla 100
Db   362 GAGAAGAACAAGTACGACGCAAGCGCCATTGCAGACTTCTCACGATGGATGGCGCC 421

Qy   101 ThrLeuCysAsnCysAlaLeuGluGluLeuArgAspValPheGlyValPheGlyGlnAsp 120
Db   422 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGGCCTTCATCGAA 481

Qy   121 LeuHisAlaGlnLeuArgAspLeuThrSerSerSerAspGlnGluAlaPheGlnTrpIleIle 140
Db   482 CTCCATGCCCAGCTGCGAGACCTCACTTCAGCTCTTCTGATGAGCTCAGTTGGATCATT 541

Qy   141 GluLeuGluLysGlyAspGlyHisMetAlaLeuAlaPheGlnLysLysAspProPheAsp 160
Db   542 GAGCTGCTGGAGAAGGGTGATGGCCATATGGCCCTGGCCTTCCAGAAGAAAGACCCCTTTGAC 601

Qy   161 GlnGlyGlySerProAlaGlnGluLeuGluLeuGlyAlaProSerGlySerSerAspValSerProTyrHis 180
Db   602 CAGGGCGGCAGCCCCGCTTTGGCCCAGGAGCTGCTGCTCGGCGACGCGTCAGCAGCCAGCCCCTACCAC 661

Qy   181 ProGlySerCysGlyAlaGlyValAlaProSerGlyAlaProSerSerSerAspValSerThrAlaGly 200
Db   662 CCCGGCAGCTGTGGCGCAGGCGTGGCCCCCTCCGGTGCCCCGAGCTCTTCCGACGTCTCCACCGCAGGG 721

Qy   201 ThrGlyAlaSerArgSerHisSerSerSerHisSerSerGlyAspValAspLeuAsp 220
Db   722 ACTGGTGCTTCTCGGAGCTCCCACTCTCAGACTCCGGAGTCGGAAGTGACGTGGACCTGGAT 781

Qy   221 ProThrAspGlyLysPheProSerAspAspGlyPheArgAspCysLysLysLysAspPro 240
Db   782 CCCACTGATGGCAAGTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGAAGGGGGATCCC 841

Qy   241 LysHisGlyLysArgGlyArgProArgLysLeuSerGluLysTrpAspCys 260
Db   842 AAGCACGGGAAGCGGGAACGAGGGCGCCCGCCAAAGCTGAGCAAAGACTACTGGGACTGT 901

Qy   261 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 280
Db   902 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 961

Qy   281 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpTrpGluAsnArgHisGlu 300
Db   962 GACATCCTCATCCACCCAGAGCTCAACGAGGGCCTCATGAAGTGGTGGGAGAATCGGCATGAA 1021

Qy   301 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 320
Db  1022 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1081

Qy   321 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysLysArgGlu 340
Db  1082 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1141

Qy   341 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 360
Db  1142 ATCCTTGAACGGGTGGATGGCCGGCGACTGGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1201

Qy   361 TrpLysGluGluValLeuGlnValLeuGlnSerArgAsn 371
Db  1202 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1234
```

```
RESULT 8
US-10-264-049-756
;  Sequence 756, Application US/10264049
;  Publication No. US20040005579A1
;  GENERAL INFORMATION:
;  APPLICANT: Birse et al.
;  TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
;  FILE REFERENCE: PA131P1
;  CURRENT APPLICATION NUMBER: US/10/264,049
;  CURRENT FILING DATE: 2002-10-04
;  PRIOR APPLICATION NUMBER: PCT/US01/18569
```

```
Db   381 GAGAAGAACAAGTACGACGCAAGCCAAGCCATTGACTTCTCACGATGGATGGCGGCC          440
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy   101 ThrLeuCysAsnCysAlaLeuGluGluLeuArgLeuValPheGlyLeuPheLeuAspGln      120
Db   441 ACCCCTGCAATTGCCCTGGAGGAGCTGCGTCTGGTCTTTGGGCTCTTCCTGGGGACCCA      500
Qy   121 LeuHisAlaGlnLeuArgAspLeuThrSerSerSerAspGluLeuSerTrpIleIle       140
Db   501 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCCTTCTGATGAGCTCAGTTGGATCATT    560
Qy   141 GluLeuGluGlyLysAspGlyMetAlaPheGlnGluLeuAlaLeuAspProGlyProPheAsp   160
Db   561 GAGCTGCTGGAGGGCAAGGATGGCATGGCCTTCCAGGAGGAGCCTAGACCCAGGGCCCTTTGAC  620
Qy   161 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGlnIleAlaSerProTyrHis     180
Db   621 CAGGGGCAGCCCCTTTGCCCAGGAGGTGCTGCGACCAGCGGTCAGCAGCCAGCCCCTACCAC   680
Qy   181 ProGlySerCysGlyAlaGlyIleAlaProSerProGlySerSerSerAspValSerThrAlaGly  200
Db   681 CCCGGCAGCTGTGGCGCAGGAGCCCCTCCCCYGGCAGCTCTGACGTCTTCCACCGCAGGG    740
Qy   201 ThrGlyAlaSerArgSerHisSerSerAspSerGlyGlySerAspAspValSerAspLeuAsp   220
Db   741 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT    800
Qy   221 ProThrAspGlyLysPheLeuProSerAspArgGlyPheAsnArgGlyArgAspAspPro     240
Db   801 CCCACTGATGGCAAGTCTTCCCCAGCGATGGTTTCGTGACTGCAAGAGAAGGGGGATCCC    860
Qy   241 LysHisGlyLysArgLysArgGlyProArgArgLeuGluLysSerGlyGluTyrTrpAspCys   260
Db   861 AAGCACGGCAAGGCGGAAAGAGGGCCGGCCGAAAGAGTACTGGGACTGT              920
Qy   261 LeuGluLeuGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg   280
Db   921 CTCGAGGGCAAGAAGAGCAAGCACGCGCCGAGGGCACCCACCTGTGGGAGTTCATCCGG    980
Qy   281 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu     300
Db   981 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA   1040
Qy   301 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuLeuTrpGlyGlnLysLys     320
Db  1041 GGGGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGCCCAACTATGGGCCAAAAAAG 1100
Qy   321 AsnSerAsnMetThrTyrGluTyrLysSerArgAlaMetArgTyrTyrLysArgGlu       340
Db  1101 AACAGCAACATGACCTACGAGTACAAGAGCCGGGCCATGAGGTACTACAAACGGGAG       1160
Qy   341 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysLysAsnSerSerGly   360
Db  1161 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC   1220
Qy   361 TrpLysGluGluGluValLeuGlnSerArgAsn   371
Db  1221 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC   1253
```

RESULT 10
US-10-131-410-64
; Sequence 64, Application US/10131410
; Publication No. US20030235915A1
; GENERAL INFORMATION:
; APPLICANT: SPECHT, THOMAS
; APPLICANT: HINZMANN, BERND
; APPLICANT: SCHMITT, ARMIN
; APPLICANT: PILARSKY, CHRISTIAN
; APPLICANT: DAHL, EDGAR
; APPLICANT: ROSENTHAL, ANDRE
; TITLE OF INVENTION: HUMAN NUCLEIC ACID SEQUENCES FROM TISSUE OF BREAST
; TITLE OF INVENTION: TUMORS
; FILE REFERENCE: SCH-1763

```
Qy   261 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg    280
Db   941 CTCGAGGGCAAGAAGAGCAAGCACGCGCCGAGGGCACCCACCTGTGGGAGTTCATCCGG   1000
Qy   281 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu    300
Db  1001 GACATCCTCATCCACCCGGAGCTYAACGAGGGCCTYATGAAGTGGGAGAATCGGCATGAA   1060
Qy   301 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuLeuTrpGlyGlnLysLys    320
Db  1061 GGGGTCTTCAAGTTCCTGCGYTCCGAGGCTGTGGCCCAACTATGGGCCCAACTATGGGCCAAAAAG  1120
Qy   321 AsnSerAsnMetThrTyrGluTyrLysSerArgAlaMetArgTyrTyrLysArgGlu      340
Db  1121 AACAGCAACATGACCTACGAGTACAAGAGCCGGGCCATGAGGTACTACAAACGGGAG      1180
Qy   341 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysLysAsnSerSerGly  360
Db  1181 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC   1240
Qy   361 TrpLysGluGluGluValLeuGlnSerArgAsn   371
Db  1241 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC   1273
```

RESULT 9
US-09-925-301-207
; Sequence 207, Application US/09925301
; Patent No. US2002005230BA1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al
; TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
; FILE REFERENCE: PA106
; CURRENT APPLICATION NUMBER: US/09/925,301
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: PCT/US00/05882
; PRIOR FILING DATE: 2000-03-08
; PRIOR APPLICATION NUMBER: 60/124,270
; PRIOR FILING DATE: 1999-03-12
; NUMBER OF SEQ ID NOS: 1694
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 207
; LENGTH: 1996
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-925-301-207

Alignment Scores:
Pred. No.:   9.21e-212   Length: 1996
Score: 1980.00   Matches: 371
Percent Similarity: 100.00%   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 100.00%   Indels: 0
DB: 9   Gaps: 0

US-08-978-217-2 (1-371) x US-09-925-301-207 (1-1996)

```
Qy     1 MetAlaAlaThrCysGluIleSerAsnIlePheSerAsnTyrPheSerAlaMetTyrSer     20
Db   141 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC    200
Qy    21 SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAlaAspAspLeu   40
Db   201 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCCGCCACCTTTGGGGCCGATGACTTG    260
Qy    41 ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGluLysTyrAlaSerTrpLeu   60
Db   261 GTACTGACCCTCTCGAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGGCCAGCTGGTTG   320
Qy    61 GlyGluGlnProGlnPheSerLysTrpProSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal  80
Db   321 GGGGAACAGCCCCAGTTCTCGGTCGAAGACGCAGGTTCTCGGACTGGATCAGCTACCAAGTG   380
Qy    81 GluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgCysAspMetAspGlyAla    100
```

```
; CURRENT APPLICATION NUMBER: US/10/131,410
; CURRENT FILING DATE: 2002-04-25
; PRIOR APPLICATION NUMBER: 09/646,673
; PRIOR FILING DATE: 2000-09-20
; PRIOR APPLICATION NUMBER: PCT/DE99/00908
; PRIOR FILING DATE: 1999-03-19
; NUMBER OF SEQ ID NOS: 202
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 64
;   LENGTH: 2269
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-131-410-64

Alignment Scores:
Pred. No.:                              Length:         2269
Score:                  3.98e-175       Matches:        315
Percent Similarity:     1654.00         Conservative:   0
Best Local Similarity:  99.37%          Mismatches:     2
Query Match:            99.37%          Indels:         2
DB:                     83.54%          Gaps:           0
                        12

US-08-978-217-2 (1-371) x US-10-131-410-64 (1-2269)
```

```
Qy   55  GluLysAlaSerTrpLeuGlyGluGlnPheTrpSerLysThrGlnValLeuAsp  74
             ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   15  GAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTTCGAAGAG-CAGGTTCTGGAC  73

Qy   75  TrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArg  94
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   74  TGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGA  133

Qy   95  CysAspMetAspGlyAlaThrLeuCysAsnCysAlaAlaLeuGluGluLeuArgLeuValPhe  114
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  134  TGTGACATGGATGGGGCCACCCTCTGCAATTGTGCCGTCGGTCTGGTCTTT  193

Qy  115  GlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerSerSerAsp  134
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  194  GGGCCTCTCGGGGACCAACTCCATGCCAGCTGCGAGACCTCACTTCCAGCTCTTCGAT  253

Qy  135  GluLeuSerTrpIleIleGluLeuLeuLysLysAspGlyMetAlaPheGlnGluAlaLeu  154
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  254  GAGCTCAGTTGGATCATTGAGCTGCTGAAGAAGGATGGCATGGCCTTCCAGGAGGCCCTA  313

Qy  155  AspProGlyProPheAspGlnGlySerProPheAlaGlnLeuLeuAspAspAspGlyGln  174
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  314  GACCCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGTTGCTCGACGACGACGTCAG  373

Qy  175  GlnAlaSerProTyrHisProGlySerCysGlyValAlaGlyValAlaProSerProGlySerSer  194
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  374  CAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGTGGCCCCTCCCCTGGCAGCTCT  433

Qy  195  AspValSerThrAlaGlyThrGlyAlaSerArgSerHisSerSerAspSerGlyGly  214
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  434  GACGTCTCCACCGCAGGAGACT-GGTGCTTCTCCGAGCTCCACTCCTCAGACTCCGGTGGA  492

Qy  215  SerAspValAlaSerProThrAspLeuAspProSerAspGlyPheArgAsp  234
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  493  AGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGAC  552

Qy  235  CysLysLysGlyAspProLysHisGlyGlyLysArgGlyArgProArgLysLeuSer  254
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  553  TGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGGAAACCAGGAGCCGGAAAGCTGAGC  612

Qy  255  LysGluTyrTrpAspCysLeuGlyLysLysSerLysHisAlaProArgGlyThrHis  274
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  613  AAAGAGTACTGGGACTGTCTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCAC  672

Qy  275  LeuTrpProIlePheArgAspIleLeuLeuHisProGluLeuAsnGlyLeuMetLys  294
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  673  CTGTGGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAG  732

Qy  295  TrpGluAsnArgHisGluGlyValPheLysValPheLysPheArgSerGlyAlaValAlaGlnLeu  314
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Db  733  TGGGAGAATCGGCATGAGGAGGGCGTCTTCAAGTTCCTGCGCTCCGGAGCTGTGGCCCAACTA  792

Qy  315  TrpGlyGlnLysLysLysAsnSerAsnMetThrTyrGluLysSerLeuSerArgAlaMetArg  334
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  793  TGGGGCCAAAGAAAAGAAACAGCAACATGACCTACGAGAAGTGAGCCGGGGCCATGAGG  852

Qy  335  TyrTyrTyrLysArgGluIleLeuGlnArgValAspArgLeuValTyrLysPhe  354
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  853  TACTACTACAAACGGGAGATCCTGGAACGGGTGGATCGGCCGGCGACTCGTCTACAAGTTT  912

Qy  355  GlyLysAsnSerSerGlyTrpLysLysGluGluValLeuGluLeuGlnSerArgAsn  371
             |||||||||||||||||||||||||||||||||||||||||||||||||||
Db  913  GGCAAAAACTCAAGCGCGCTGGAAGGAGGAAGAGAGGTTCTCCAGAGTCGGAAC  963
```

```
RESULT 11
US-09-922-217-853/c
; Sequence 853, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Lodes, Michael J.
;   APPLICANT: Secrist, Heather
;   APPLICANT: Benson, Darin R.
;   APPLICANT: Meagher, Madeleine Joy
;   APPLICANT: Stolk, John A.
;   APPLICANT: Wang, Tongtong
;   APPLICANT: Jiang, Yuqiu
;   APPLICANT: Smith, Carole Lynn
;   APPLICANT: King, Gordon E.
;   APPLICANT: Wang, Aijun
;   APPLICANT: Clapper, Jonathan D.
;   TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;   TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.471C13
;   CURRENT APPLICATION NUMBER: US/09/922,217
;   CURRENT FILING DATE: 2001-08-03
;   NUMBER OF SEQ ID NOS: 1124
;   SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 853
;   LENGTH: 626
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-922-217-853

Alignment Scores:
Pred. No.:                              Length:         626
Score:                  8.4e-117        Matches:        208
Percent Similarity:     1127.00         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     56.92%          Gaps:           0
                        9

US-08-978-217-2 (1-371) x US-09-922-217-853 (1-626)
```

```
Qy   53  GlyThrGluLysAlaSerTrpLeuGlyGluGlnProGlnPheTrpSerLysThrGlnVal  72
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  624  GGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTT  565

Qy   73  LeuAspTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerAlaIleAspPhe  92
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  564  CTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTC  505

Qy   93  SerArgCysAspMetAspGlyAlaThrLeuCysAsnCysAlaAlaLeuGluGluLeuArgLeu  112
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  504  TCACGATGTGACATGGATGGGGCCACCCTCTGCAATTGTGCCGTCGGTCTGGTCTG  445

Qy  113  ValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerSerSer  132
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  444  GTCTTTGGGCCTCTCGGGGACCAACTCCATGCCAGCTGCGAGACCTCACTTCCAGCTCT  385

Qy  133  SerAspAspLeuSerTrpIleIleGluLeuLeuLysLysAspGlyMetAlaPheGlnGlu  152
             |||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

Right column (RESULT 13)

```
Db   133  SerAspGluLeuSerTrpIleIleGluLeuGluLysAspGlyMetAlaPheGlnGlu  152
          TCTGATGAGCTCAGTTGGATCATTGAGCTGGAGAAGGATGGCTTCCAGGAG  325

Qy   384  AlaLeuAspProGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAsp  172
          GCCCTAGACCCAGGGCCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGAC  265

Db   153  AlaLeuAspProGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAsp  172
          GCCCTAGACCCAGGGCCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGAC  265

Qy   324  GlyGlnGlnAlaSerProTyrHisProGlySerCysGlyAlaGlyAlaProSerProGly  192
          GGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCTCCCCGGC  205

Db   173  GlyGlnGlnAlaSerProTyrHisProGlySerCysGlyAlaGlyAlaProSerProGly  192
          GGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCTCCCCGGC  205

Qy   264  SerSerAspValSerThrAlaGlyThrAlaSerArgSerHisSerSerAspSer  212
          AGTCTTCGAGTCTCCACCGCAGGGACTGGTCTTCTCGGAGCTCCCACTCCTCAGACTCC  145

Db   193  SerSerAspValSerThrAlaGlyThrAlaSerArgSerHisSerSerAspSer  212
          AGTCTTCGAGTCTCCACCGCAGGGACTGGTCTTCTCGGAGCTCCCACTCCTCAGACTCC  145

Qy   204  GlyGlySerAspValAspLeuAspProThrAspGlyLysLeuPheProSerAspGlyPhe  232
          GGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTT  85

Db   213  GlyGlySerAspValAspLeuAspProThrAspGlyLysLeuPheProSerAspGlyPhe  232
          GGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTT  85

Qy   144  ArgAspCysLysLysGlyHisGlyLysAspProLysHisGlyHisArgGlyLysProArgLys  252
          CGTGACTGCAAGAAGGGGATCCCAAGCACGGAAGCGGAAACGAGGGCGGCCCCGAAAG  25

Db   233  ArgAspCysLysLysGlyHisGlyLysAspProLysHisGlyHisArgGlyLysProArgLys  252
          CGTGACTGCAAGAAGGGGATCCCAAGCACGGAAGCGGAAACGAGGGCGGCCCCGAAAG  25

Qy   84   LeuSerLysGluTyrTrpAspCys  260
          CTGAGCAAAGAGTACTGGGACTGT  1

Db   253  LeuSerLysGluTyrTrpAspCys  260
          CTGAGCAAAGAGTACTGGGACTGT  1
```

RESULT 13
US-10-025-380-853/c
; Sequence 853, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Lodes, Michael J.
;   APPLICANT: Secrist, Heather
;   APPLICANT: Benson, Darin R.
;   APPLICANT: Meagher, Madeleine Joy
;   APPLICANT: Stolk, John A.
;   APPLICANT: Wang, Tongtong
;   APPLICANT: Jiang, Yuqiu
;   APPLICANT: Smith, Carole L.
;   APPLICANT: King, Gordon E.
;   APPLICANT: Wang, Aijun
;   APPLICANT: Clapper, Jonathan D.
;   APPLICANT: Skeiky, Yasir A. W.
;   APPLICANT: Fanger, Gary R.
;   APPLICANT: Vedvick, Thomas S.
;   APPLICANT: Carter, Darrick
;   TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;   TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.471C14
;   CURRENT APPLICATION NUMBER: US/10/025,380
;   CURRENT FILING DATE: 2001-12-19
;   NUMBER OF SEQ ID NOS: 1129
;   SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 853
;   LENGTH: 626
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-025-380-853

Alignment Scores:
Pred. No.:   Length: 626
Score: 8.4e-117   Matches: 208
Percent Similarity: 1127.00   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 56.92%   Indels: 0
DB: 14   Gaps: 0

US-08-978-217-2 (1-371) x US-10-025-380-853 (1-626)

Left column (RESULT 12)

```
Db   384  TCTGATGAGCTCAGTTGGATCATTGAGCTGGAGAAGGATGGCTTCCAGGAG  325

Qy   153  AlaLeuAspProGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAsp  172
          GCCCTAGACCCAGGGCCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGAC  265

Db   324  GGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCTCCCCGGC  205

Qy   173  GlyGlnGlnAlaSerProTyrHisProGlySerCysGlyAlaGlyAlaProSerProGly  192
          GGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCTCCCCGGC  205

Db   264  GGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCTCCCCGGC  205

Qy   193  SerSerAspValSerThrAlaGlyThrAlaSerArgSerHisSerSerAspSer  212
          AGTCTTCGAGTCTCCACCGCAGGGACTGGTCTTCTCGGAGCTCCCACTCCTCAGACTCC  145

Db   204  AGTCTTCGAGTCTCCACCGCAGGGACTGGTCTTCTCGGAGCTCCCACTCCTCAGACTCC  145

Qy   213  GlyGlySerAspValAspLeuAspProThrAspGlyLysLeuPheProSerAspGlyPhe  232
          GGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTT  85

Db   144  GGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTT  85

Qy   233  ArgAspCysLysLysGlyHisGlyLysAspProLysHisGlyHisArgGlyLysProArgLys  252
          CGTGACTGCAAGAAGGGGATCCCAAGCACGGAAGCGGAAACGAGGGCGGCCCCGAAAG  25

Db   84   CGTGACTGCAAGAAGGGGATCCCAAGCACGGAAGCGGAAACGAGGGCGGCCCCGAAAG  25

Qy   253  LeuSerLysGluTyrTrpAspCys  260
          CTGAGCAAAGAGTACTGGGACTGT  1

Db   24   CTGAGCAAAGAGTACTGGGACTGT  1
```

RESULT 12
US-09-833-263-853/c
; Sequence 853, Application US/09833263
; Patent No. US20011054 7A1
; GENERAL INFORMATION:
;   APPLICANT: Wang, Aijun
;   APPLICANT: Clapper, Jonathan D.
;   APPLICANT: Stolk, John A.
;   APPLICANT: Meagher, Madeleine J.
;   TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
;   TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.471C12
;   CURRENT APPLICATION NUMBER: US/09/833,263
;   CURRENT FILING DATE: 2001-04-10
;   NUMBER OF SEQ ID NOS: 1093
;   SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 853
;   LENGTH: 626
;   TYPE: DNA
;   ORGANISM: Homo sapien
US-09-833-263-853

Alignment Scores:
Pred. No.:   Length: 626
Score: 8.4e-117   Matches: 208
Percent Similarity: 1127.00   Conservative: 0
Best Local Similarity: 100.00%   Mismatches: 0
Query Match: 56.92%   Indels: 0
DB: 10   Gaps: 0

US-08-978-217-2 (1-371) x US-09-833-263-853 (1-626)

```
Qy   53   GlyThrGluLysAlaSerTrpLeuGlyGluGlnProGlnPheTrpSerLysThrGlnVal  72
          GGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTT  565

Db   624  GGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTT  565

Qy   73   LeuAspTrpIleSerTyrGlnValGluLysAsnGluLysTyrAspAlaSerAlaIleAspPhe  92
          CTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACCCAAGCGCCATTGACTTC  505

Db   564  CTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACCCAAGCGCCATTGACTTC  505

Qy   93   SerArgCysAspMetAspGlyAlaThrLeuCysAlaLeuGluGluLeuArgLeu  112
          TCACGATGTGACATGGATGGCGCCACCCTGCAATTGTGCCCTTGAGGAGCTGCGTCTG  445

Db   504  TCACGATGTGACATGGATGGCGCCACCCTGCAATTGTGCCCTTGAGGAGCTGCGTCTG  445

Qy   113  ValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerSer  132
          GTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCT  385

Db   444  GTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCT  385
```

```
Alignment Scores:
Pred. No.:              7.4e-104          Length:          563
Score:                  1011.00           Matches:         187
Percent Similarity:     100.00%           Conservative:      0
Best Local Similarity:  100.00%           Mismatches:        0
Query Match:            51.06%            Indels:            0
DB:                                       Gaps:              0

US-08-978-217-2 (1-371) x US-09-922-217-944 (1-563)

Qy  74 AspTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerAlaIleAspPheSer  93
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 562 GACTGGATCAGTCAGTACCAAGTGGAGAAGAACAAGTACGACGGAAGGCCATTGACTTCTCA 503

Qy  94 ArgCysAspMetAspGlyAlaThrLeuCysAsnCysAlaLeuGluGluLysArgLeuVal 113
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 502 CGATGTGACATGGATGGCGCCACCCTGTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTC 443

Qy 114 PheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerSerSer 133
       |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 442 TTTGGGCCTCTTGGGGACCAACTCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCT 383

Qy 134 AspGluLeuSerTrpIleIleGluLeuGluLysGluGlyLysMetAlaPheGlnGluGluAla 153
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 382 GATGAGCTCAGTTGGATCATTGAGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCC 323

Qy 154 LeuAspProGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAspGly 173
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 322 CTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGT 263

Qy 174 GlnGlnAlaSerProTyrHisProGlySerCysGlyAlaGlyAlaProSerProGlySer 193
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 262 CAGCAGGCCAGCCCCTACCAGCCTGGTGGCCCAGCGCCCCTCCCCGGCAGC 203

Qy 194 SerAspValSerThrAlaGlyThrGlyAlaSerArgSerHisSerAspSerGly 213
       |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 202 TCTGACGTCTCCACCGCAGGGACTGGCGCTTCTCGGAGCTCCACTCTCAGACTCCGGT 143

Qy 214 GlySerAspValAspLeuAspProThrAspGlyLysLeuPheProSerAspGlyPheArg 233
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 142 GGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGT 83

Qy 234 AspCysLysLysGlyAspProLysHisGlyLysArgLysArgProArgLysLeu 253
       |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  82 GACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGGCCGGAAAGCTG 23

Qy 254 SerLysGluTyrTrpAspCys 260
       |||||||||||||||||||||
Db  22 AGCAAAGAGTACTGGGACTGT 2
```

RESULT 15
US-09-833-263-944/c
; Sequence 944, Application US/09833263
; Patent No. US20020110547A1
GENERAL INFORMATION:
;   APPLICANT: Wang, Aijun
;   APPLICANT: Clapper, Jonathan D.
;   APPLICANT: Stolk, John A.
;   APPLICANT: Meagher, Madeleine J.
;   TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
;   TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.471C12
;   CURRENT APPLICATION NUMBER: US/09/833,263
;   CURRENT FILING DATE: 2001-04-10
;   NUMBER OF SEQ ID NOS: 1093
;   SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 944
;   LENGTH: 563
;   TYPE: DNA
;   ORGANISM: Homo sapien
US-09-833-263-944

```
Qy  53 GlyThrGluLysAlaSerTrpLeuGlyGluGlnProGlnPheTrpSerThrGlnVal 72
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 624 GGTACAGAGAAGGCCAGCTGGCTGGGGGAACAGCCCCAGTTCTGGTCGACGACGCAGGTT 565

Qy  73 LeuAspTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerAlaIleAspPhe 92
       |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 564 CTGGACTGGATCAGTCAGTACCAAGTGGAGAAGAACAAGTACGACGCCAAGGCCATTGACTTC 505

Qy  93 SerArgCysAspMetAspGlyAlaThrLeuCysAsnCysAlaLeuGluGluLysArgLeu 112
       |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 504 TCACGATGTGACATGGATGGCGCCACCCTGTGCAATTGTGCCCTTGAGGAGCTGCGTCTG 445

Qy 113 ValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerSerSer 132
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 444 GTCTTTGGGCCTCTGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCT 385

Qy 133 SerAspGluLeuSerTrpIleIleGluLeuGluLysGluGlyLysMetAlaPheGlnGlu 152
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 384 TCTGATGAGCTCAGTTGGATCATTGAGCTGGAGAAGGATGGCATGGCCTTCCAGGAG 325

Qy 153 AlaLeuAspProGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAsp 172
       |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 324 GCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGAC 265

Qy 173 GlyGlnGlnAlaSerProTyrHisProGlySerCysGlyAlaGlyAlaProSerProGly 192
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 264 GGTCAGCAGGCCAGCCCCTACCAGCCTGGTGGCCCAGCGCCCCTCCCCGGC 205

Qy 193 SerSerAspValSerThrAlaGlyThrGlyAlaSerArgSerHisSerAspSer 212
       |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 204 AGTTCTGACGTCTCCACCGCAGGGACTGGCGCTTCTCGGAGCTCCACTCTCAGACTCC 145

Qy 213 GlyGlySerAspValAspLeuAspProThrAspGlyLysLeuPheProSerAspGlyPhe 232
       ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 144 GGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTT 85

Qy 233 ArgAspCysLysLysGlyAspProLysHisGlyLysArgLysArgProArgLys 252
       |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  84 CGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGGCCGGAAAG 25

Qy 253 LeuSerLysGluTyrTrpAspCys 260
       ||||||||||||||||||||||||
Db  24 CTGAGCAAAGAGTACTGGGACTGT 1
```

RESULT 14
US-09-922-217-944/c
; Sequence 944, Application US/09922217
; Patent No. US20020076414A1
GENERAL INFORMATION:
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Lodes, Michael J.
;   APPLICANT: Secrist, Heather
;   APPLICANT: Benson, Darin R.
;   APPLICANT: Meagher, Madeleine Joy
;   APPLICANT: Stolk, John A.
;   APPLICANT: Wang, Tongtong
;   APPLICANT: Jiang, Yuqiu
;   APPLICANT: Smith, Carole Lynn
;   APPLICANT: King, Gordon E.
;   APPLICANT: Wang, Aijun
;   APPLICANT: Clapper, Jonathan D.
;   TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;   TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.471C13
;   CURRENT APPLICATION NUMBER: US/09/922,217
;   CURRENT FILING DATE: 2001-08-03
;   NUMBER OF SEQ ID NOS: 1124
;   SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 944
;   LENGTH: 563
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-922-217-944

```
Alignment Scores:
Pred. No.:             7.4e-104        Length:            563
Score:                 1011.00         Matches:           187
Percent Similarity:    100.00%         Conservative:      0
Best Local Similarity: 100.00%         Mismatches:        0
Query Match:           51.06%          Indels:            0
DB:                    10              Gaps:              0

US-08-978-217-2 (1-371) x US-09-833-263-944 (1-563)

Qy    74  AspTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerAlaIleAspPheSer    93
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   562  GACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACCGACAGCGCCATTGACTTCTCA   503

Qy    94  ArgCysAspMetAspGlyAlaThrLeuCysAsnCysAlaLeuGluGluLeuArgLeuVal   113
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   502  CGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTC   443

Qy   114  PheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerSerSer     133
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   442  TTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCT   383

Qy   134  AspGluLeuSerTrpIleIleGluLeuLeuLeuLysAspGlyMetAlaPheGlnGluAla   153
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   382  GATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCC   323

Qy   154  LeuAspProGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAspGly   173
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   322  CTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGT   263

Qy   174  GlnGlnAlaSerProTyrHisProGlySerCysGlyAlaGlyAlaProSerProGlySer   193
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   262  CAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCTCCCCGGCAGC    203

Qy   194  SerAspValSerThrAlaGlyThrGlyValAlaSerArgSerHisSerAspSerGly     213
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   202  TCTGACGTCTCCACGGCAGGGACTGGTGCTTCTCGGAGTCCCACTCCTCAGACTCCGGT   143

Qy   214  GlySerAspValAspLeuAspProThrAspGlyLysLeuPheProSerAspGlyPheArg   233
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   142  GGAAGTGACGTGACCTGACCTGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTCGT    83

Qy   234  AspCysLysLysGlyAspProLysHisGlyLysGlyArgGlyArgProArgLysLysLeu   253
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    82  GACTGCAAGAAGGGGGAATCCAAGCACGGGAAGCACGGGAAACAGGCCGCCCCGAAAGCTG    23

Qy   254  SerLysGluTyrTrpAspCys   260
          |||||||||||||||||||||
Db    22  AGCAAAGAGTACTGGGACTGT    2
```

Search completed: February 13, 2004, 01:45:58
Job time : 598.395 secs

```
                    GenCore version 5.1.6
          Copyright (c) 1993 - 2004  Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on:        February 13, 2004, 01:27:22 ; Search time 393.438 Seconds
                                          (without alignments)
                                     10448.744 Million cell updates/sec

Title:         US-08-978-217-1
Perfect score: 1116
Sequence:      1 ATGGCTGCAACCTGTGAGAT.........TTCTCCAGAGTCGGAACTGA 1116

Scoring table: IDENTITY_NUC
               Gapop 10.0 , Gapext 1.0

Searched:      2449703 seqs, 181816367 residues

Total number of hits satisfying chosen parameters:        4899406

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

Database :     Published_Applications_NA:*
               1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
               2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
               3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
               4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
               5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
               6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
               7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
               8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
               9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
              10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
              11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
              12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
              13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq2:*
              14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
              15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
              16: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
              17: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
              18: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*
```

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.		Score	Query Match %	Length	DB	ID	Description	
1		1116	100.0	1907	15	US-10-097-340-74	Sequence 74, Appl
2		1116	100.0	1915	10	US-09-964-824A-101	Sequence 101, App
3		1116	100.0	1915	10	US-09-964-824A-563	Sequence 563, App
4		1116	100.0	1915	10	US-09-880-107-3420	Sequence 3420, App
5		1116	100.0	1915	10	US-09-967-768A-192	Sequence 192, App
6		1116	100.0	1917	9	US-09-922-217-1105	Sequence 1105, Ap
7		1116	100.0	1917	14	US-10-025-380-1105	Sequence 1105, Ap
8		1115.6	100.0	1996	9	US-09-925-301-207	Sequence 207, App
9		1114.4	99.9	1956	12	US-10-264-049-756	Sequence 756, App
10		933	83.6	2269	12	US-10-131-410-64	Sequence 64, Appl
11		624.4	55.9	626	9	US-09-922-217-853	Sequence 853, App
c	12	624.4	55.9	626	9	US-09-833-263-853	Sequence 853, App
c	13	624.4	55.9	626	14	US-10-025-380-853	Sequence 853, App
c	14	561.4	50.3	563	9	US-09-922-217-944	Sequence 944, App
c	15	561.4	50.3	563	10	US-09-833-263-944	Sequence 944, App

c	16	561.4	50.3	563	14	US-10-025-380-944	Sequence 944, App
17		499.4	44.7	502	9	US-09-604-287A-282	Sequence 282, App
18		499.4	44.7	502	10	US-09-339-338-282	Sequence 282, App
19		499.4	44.7	502	11	US-09-551-621-282	Sequence 282, App
20		499.4	44.7	502	13	US-10-124-805-282	Sequence 282, App
21		499.4	44.7	502	14	US-10-007-805-282	Sequence 282, App
22		499.4	44.7	502	15	US-10-076-622-282	Sequence 282, App
c	23	455	40.8	499	10	US-09-998-598-2290	Sequence 2290, Ap
24		372	33.3	437	10	US-09-998-598-2216	Sequence 2216, Ap
c	25	349	31.3	355	10	US-09-867-701-4818	Sequence 4818, Ap
26		236	21.1	275	15	US-10-060-036-3261	Sequence 3261, Ap
27		220	19.7	451	10	US-09-998-598-32	Sequence 32, Appl
c	28	199	17.8	1435	12	US-10-292-798-1601	Sequence 1601, Ap
c	29	199	17.8	1435	13	US-10-017-161-1953	Sequence 1953, Ap
c	30	175.6	15.7	440	10	US-09-960-352-11873	Sequence 11873, A
c	31	174	15.6	174	10	US-09-998-598-1740	Sequence 1740, Ap
c	32	173.8	15.6	852	9	US-09-759-143-44	Sequence 44, Appl
c	33	173.8	15.6	852	9	US-09-760-669-44	Sequence 44, Appl
c	34	173.8	15.6	852	9	US-09-030-606-44	Sequence 44, Appl
c	35	173.8	15.6	852	9	US-09-822-827-44	Sequence 44, Appl
36		173.8	15.6	852	9	US-09-115-445-44	Sequence 44, Appl
c	37	173.8	15.6	852	10	US-09-232-880-44	Sequence 44, Appl
c	38	173.8	15.6	852	10	US-09-895-793-44	Sequence 44, Appl
c	39	173.8	15.6	852	10	US-09-895-814-44	Sequence 44, Appl
c	40	173.8	15.6	852	13	US-10-144-678A-44	Sequence 44, Appl
c	41	173.8	15.6	852	14	US-10-294-025-44	Sequence 44, Appl
c	42	173.8	15.6	852	14	US-10-012-896-44	Sequence 44, Appl
c	43	173.8	15.6	852	15	US-10-010-940-44	Sequence 44, Appl
44		173.4	15.5	1426	9	US-09-925-297-309	Sequence 309, App
c	45	173.4	15.5	1426	15	US-10-106-698-935	Sequence 935, App

ALIGNMENTS

```
RESULT 1
US-10-097-340-74
; Sequence 74, Application US/10097340
; Publication No. US20030008725OA1
; GENERAL INFORMATION:
;  APPLICANT: John MONAHAN
;  APPLICANT: Manjula GANNAVARAPU
;  APPLICANT: Sebastian HOERSCH
;  APPLICANT: Shubhangi KAMATKAR
;  APPLICANT: Steve G. KOVATS
;  APPLICANT: Rachel E. MEYERS
;  APPLICANT: Michael MORRISEY
;  APPLICANT: Peter OLANDT
;  APPLICANT: Ami SEN
;  APPLICANT: Peter VEIBY
;  APPLICANT: Gordon B. MILLS
;  APPLICANT: Robert C. BAST, Jr.
;  APPLICANT: Karen LU
;  APPLICANT: Rosemarie SCHMANDT
;  APPLICANT: Xumei ZHAO
;  APPLICANT: Karen GLATT
;  TITLE OF INVENTION: Nucleic Acid Molecules and Proteins For The Identification,
;  TITLE OF INVENTION: Assessment, Prevention, and Therapy of Ovarian Cancer
;  FILE REFERENCE: MRI-030
;  CURRENT APPLICATION NUMBER: US/10/097,340
;  CURRENT FILING DATE:    2002-03-14
;  PRIOR APPLICATION NUMBER: 60/276,025
;  PRIOR FILING DATE: 2001-03-14
;  PRIOR APPLICATION NUMBER: 60/325,149
;  PRIOR FILING DATE: 2001-09-26
;  PRIOR APPLICATION NUMBER: 60/276,026
;  PRIOR FILING DATE: 2001-03-14
;  PRIOR APPLICATION NUMBER: 60/324,967
;  PRIOR FILING DATE: 2001/09/26
;  PRIOR APPLICATION NUMBER: 60/311,732
;  PRIOR FILING DATE: 2001-08-10
;  PRIOR APPLICATION NUMBER: 60/325,102
;  PRIOR FILING DATE: 2001-09-26
```

```
;  PRIOR APPLICATION NUMBER: 60/323,580
;  PRIOR FILING DATE: 2001-09-19
;  NUMBER OF SEQ ID NOS: 363
;  SOFTWARE: FastSEQ for Windows Version 4.0
;  SEQ ID NO 74
;  LENGTH: 1907
;  TYPE: DNA
;  ORGANISM: Homo sapiens
US-10-097-340-74

  Query Match        100.0%;  Score 1116;  DB 15;  Length 1907;
  Best Local Similarity  100.0%;  Pred. No. 2e-313;
  Matches 1116;  Conservative  0;  Mismatches  0;  Indels  0;  Gaps  0;

Qy    1 ATGGCTGCAACCTGTGAGATTAGCAACACATTTTAGCAACTACTTCAGTGCGATGTACAGC 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   96 ATGGCTGCAACCTGTGAGATTAGCAACACATTTTAGCAACTACTTCAGTGCGATGTACAGC 155

Qy   61 TCGGAGGACTCCACCCGCCTCTGCCTCGTTCCCCGTGCCCACCTTTGGGGCCGATGACTTG 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  156 TCGGAGGACTCCACCCGCCTCTGCCTCGTTCCCCGTGCCCACCTTTGGGGCCGATGACTTG 215

Qy  121 GTACTGACCTGACCAACCCCCAGATGTCAGATGTACAGAGGTACAGAGGTACAGAGAGGA 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  216 GTACTGACCTGACCAACCCCCAGATGTCAGATGTACAGAGGTACAGAGGTACAGAGAGGA 275

Qy  181 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGTTCTGGATCAGCTACCAAGTG 240
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  276 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGTTCTGGATCAGCTACCAAGTG 335

Qy  241 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGACATGGACATGGCGCC 300
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  336 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGACATGGACATGGCGCC 395

Qy  301 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGGCCTCTGGGGGACCAA 360
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  396 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGGCCTCTGGGGGACCAA 455

Qy  361 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 420
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  456 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 515

Qy  421 GAGTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 480
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  516 GAGTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 575

Qy  481 CAGGGCAGCCCTTGCCCAGGAGCTGCTGGACGACGGTCAGCGAGCCCAGCCCCTACCAC 540
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  576 CAGGGCAGCCCTTGCCCAGGAGCTGCTGGACGACGGTCAGCGAGCCCAGCCCCTACCAC 635

Qy  541 CCCGGCAGCTGTGGCGCAGGAGCCCCTCCCGCAGCTCTGACGTCTCCACCGCGAGGG 600
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  636 CCCGGCAGCTGTGGCGCAGGAGCCCCTCCCGCAGCTCTGACGTCTCCACCGCGAGGG 695

Qy  601 ACTGGTGCTTCTCCGGAGCTCCCGGTGGAAGTGACGTGGACCTGGAT 660
          |||||||||||||||||||||||||||||||||||||||||||||||
Db  696 ACTGGTGCTTCTCCGGAGCTCCCGGTGGAAGTGACGTGGACCTGGAT 755

Qy  661 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGATCCC 720
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  756 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGATCCC 815

Qy  721 AAGCACGGGAAGCCGAAACGAGGCCCCGAAAGCTGAGCAAGAGTACTGGGACTGT 780
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  816 AAGCACGGGAAGCCGAAACGAGGCCCCGAAAGCTGAGCAAGAGTACTGGGACTGT 875

Qy  781 CTCGGAGGCCAAGAGAGCAAGCACGCGCCACCTGTGGGAGTTCATCCGG 840
          |||||||||||||||||||||||||||||||||||||||||||||||||
Db  876 CTCGGAGGCCAAGAGAGCAAGCACGCGCCACCTGTGGGAGTTCATCCGG 935

Qy  841 GACATCCTCATCCACCCGGAGCTCAACAGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 900
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  936 GACATCCTCATCCACCCGGAGCTCAACAGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 995
```

```
Qy  901 GGCGTCTTCAAGTTCCTGCGCTCCGAGAGCTGTGGCCCAACTATGGGCCAAAAGAAAAAG 960
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1056 GGCGTCTTCAAGTTCCTGCGCTCCGAGAGCTGTGGCCCAACTATGGGCCAAAAGAAAAAG 1055

Qy  961 AACAGCAACATGACCTACGAAGACTACTTCAGTGAGCGGCCATGAGCCGGCCATGAGGTAGTACTACAAACGGGAG 1020
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1056 AACAGCAACATGACCTACGAAGACTACTTCAGTGAGCGGCCATGAGCCGGCCATGAGGTAGTACTACAAACGGGAG 1115

Qy 1021 ATCCTGAACGGTGATGGCCGGCGACTCGTCTCACAAGTTGGCAAAACTCAAGCGGC 1080
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1116 ATCCTGAACGGTGATGGCCGGCGACTCGTCTCACAAGTTGGCAAAAACTCAAGCGGC 1175

Qy 1081 TGGAGGAGAAGAGGTTCTCAGAGTCGGAACTGA 1116
          |||||||||||||||||||||||||||||||||
Db 1176 TGGAAGGAGGAAGAGAGGTTCTCCAGAGTCGGAACTGA 1211
```

```
RESULT 2
US-09-964-824A-101
;  Sequence 101, Application US/09964824A
;  Patent No. US20020102531A1
;  GENERAL INFORMATION:
;  APPLICANT: Horrigan, Stephen
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signat
;  TITLE OF INVENTION: Sets
;  FILE REFERENCE: 689290-73
;  CURRENT APPLICATION NUMBER: US/09/964,824A
;  CURRENT FILING DATE: 2001-09-27
;  PRIOR APPLICATION NUMBER: US/60/236,033
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,032
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,028
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 583
;  SOFTWARE: PatentIn version 3.0
;  SEQ ID NO 101
;  LENGTH: 1915
;  TYPE: DNA
;  ORGANISM: Homo sapiens
US-09-964-824A-101

  Query Match        100.0%;  Score 1116;  DB 10;  Length 1915;
  Best Local Similarity  100.0%;  Pred. No. 2e-313;
  Matches 1116;  Conservative  0;  Mismatches  0;  Indels  0;  Gaps  0;

Qy    1 ATGGCTGCAACCTGTGAGATTAGCAACATTTTAGCAACTACTTCAGTGCGATGTACAGC 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  120 ATGGCTGCAACCTGTGAGATTAGCAACATTTTAGCAACTACTTCAGTGGATGTACAGC 179

Qy   61 TCGGAGGACTCCACCCGCCTCTGTCCCCCTGCTCCCCTTTGGGGCCGATGACTTG 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  180 TCGGAGGACTCCACCCGCCTCTGTCCCCCTGCTCCCCTTTGGGGCCGATGACTTG 239

Qy  121 GTACTGACCCAGGCAACCCCCAGAGTGTCATTGGAGGGTACAGAGGTACAGAGGTTG 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  240 GTACTGACCCAGGCAACCCCCAGAGTGTCATTGGAGGGTACAGAGGTACAGAGGTTG 299

Qy  181 GGGGAACAACCCCAGTTCTGGTCATTGGAGGGTACAGAGAAGGGCCAGCTGGTTG 240
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  300 GGGGAACAACCCCAGTTCTGGTCATTGGAGGGTACAGAGAAGGGCCAGCTGGTTG 359

Qy  241 GAGAAGAACAAGTACGACGCAAGCCGCCATTGACTTCTCACGCATGGCGGCC 300
          |||||||||||||||||||||||||||||||||||||||||||||||||||
Db  360 GAGAAGAACAAGTACGACGCAAGCCGCCATTGACTTCTCACGCATGGCGGCC 419

Qy  301 ACCCTCTGCAATTGTCCCCTTGAGGAGCTGCGTCTTGGGGTCTTCTGGGGGACCAA 360
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  420 ACCCTCTGCAATTGTCCCCTTGAGGAGCTGCGTCTTGGGGTCTTCTGGGGGACCAA 479

Qy  361 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 420
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  361
```

; ORGANISM: Homo sapiens
US-09-964-824A-563

```
Query Match        100.0%;   Score 1116;  DB 10;  Length 1915;
Best Local Similarity  100.0%;  Pred. No. 2e-313;
Matches 1116;  Conservative  0;  Mismatches  0;  Indels  0;  Gaps  0;

Qy    1 ATGGCTGCAACCTGTGAGATTAGCAACATTTTAGCAACTACTTCAGTGCGGATGTACAGC   60
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  120 ATGGCTGCAACCTGTGAGATTAGCAACATTTTAGCAACTACTTCAGTGCGGATGTACAGC  179

Qy   61 TCGGAGGACTCACCCTGGCCTCGTTCCCCGTGCTCCACCTTTGGGCCGATGACTGGTTG  120
        |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  180 TCGGAGGACTCACCCTGGCCTCGTTCCCCGTGCTCCACCTTTGGGCCGATGACTGGTTG  239

Qy  121 GTACTGACCCTGAGCAACCCCAGATGTCATTGGACGGTACAGAGACAGAGAGGGCAGCTGGTTG  180
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  240 GTACTGACCCTGAGCAACCCCAGATGTCATTGGACGGTACAGAGACAGAGAGGGCAGCTGGTTG  299

Qy  181 GGGAACAGCCCCAGTTCTGGTCGAGACGCAAGCGGCCATTGACTTCTCACGATGTGACATGGCGCC  240
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  300 GGGAACAGCCCCAGTTCTGGTCGAGACGCAAGCGGCCATTGACTTCTCACGATGTGACATGGCGCC  359

Qy  241 GAGAAGAACAAGTACGACGCAAGCGGCCATTGACTTCTCGTGTCTGTTTGGGGGACCAA  300
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  360 GAGAAGAACAAGTACGACGCAAGCGGCCATTGACTTCTCGTGTCTGTTTGGGGGACCAA  419

Qy  301 ACCCTCTGCAATTGTGCCCTGAGGAGCTCACTTCCAGCTCTTCTGATGATGTGGGGACCAA  360
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  420 ACCCTCTGCAATTGTGCCCTGAGGAGCTCACTTCCAGCTCTTCTGATGATGTGGGGACCAA  479

Qy  361 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT  420
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  480 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT  539

Qy  421 GAGCTGCTGGAGAAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTTGAC  480
        ||||||||||||||||||||||||||||||||||||||||||||||||
Db  540 GAGCTGCTGGAGAAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTTGAC  599

Qy  481 CAGGGCAGCCCCTTTGCTGGACGAGCTGCTGGACGAGTCAGCAAGCCAGCCCCTACCAC  540
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  600 CAGGGCAGCCCCTTTGCTGGACGAGCTGCTGGACGAGTCAGCAAGCCAGCCCCTACCAC  659

Qy  541 CCCGGCAGTGTGCGGCAGGAGAGCCCCTCCCTGGCAGTCTCCACCGCAGGG  600
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  660 CCCGGCAGTGTGCGGCAGGAGAGCCCCTCCCTGGCAGTCTCCACCGCAGGG  719

Qy  601 ACTGTGCTTCTCCGAGCTCCCAGCAGCGATGGTTTCGTGACTCAAGAAGGGGGGGATCCC  660
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  720 ACTGTGCTTCTCCGAGCTCCCAGCAGCGATGGTTTCGTGACTCAAGAAGGGGGGGATCCC  779

Qy  661 CCCACTGATGGCAAGCTCTTCCCCAGGCGCCGGAAACGAGCCGGCCGCCCTCAGGAGGGGGGATCCC  720
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  780 CCCACTGATGGCAAGCTCTTCCCCAGGCGCCGGAAACGAGCCGGCCGCCCTCAGGAGGGGGGATCCC  839

Qy  721 AAGCACGGGAAGCCGGAAACGAGGCGGCCGCCCTGAGCCGGCCATGAGAGTACTGGGACTGT  780
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  840 AAGCACGGGAAGCCGGAAACGAGGCGGCCGCCCTGAGCCGGCCATGAGAGTACTGGGACTGT  899

Qy  781 CTCGAGGGCAAGAAGCAAGCACGCGCGCCCAGCTCAACGAGAGTGGGAGTTCATCCGG  840
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  900 CTCGAGGGCAAGAAGCAAGCACGCGCGCCCAGCTCAACGAGAGTGGGAGTTCATCCGG  959

Qy  841 GACATCCTCATCCCGCGAGCTCAACGAGGGCCTCAAGAGTGGGGAATCGGCATGAA  900
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  960 GACATCCTCATCCCGCGAGCTCAACGAGGGCCTCAAGAGTGGGGAATCGGCATGAA  1019

Qy  901 GGGGTCTTCAAGTTCCTGCGCCTCCGGAGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG  960
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1020 GGGGTCTTCAAGTTCCTGCGCCTCCGGAGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG  1079

Qy  961 AACAGCAACATGACCTACGAGAAGCTGACGCGGAGCTGAGCCCGGGCCATGAGTACTACTACAAACGGGAG  1020
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1080 AACAGCAACATGACCTACGAGAAGCTGACGCGGAGCTGAGCCCGGGCCATGAGTACTACTACAAACGGGAG  1139

Qy 1021 ATCCTGGAACGGGTGATGGCCGGGACTCGTTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC  1080
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1140 ATCCTGGAACGGGTGATGGCCGGGACTCGTTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC  1199

Qy 1081 TGGAAGGAGGAGAGGTTCTCCAGAGTCGGAACTGA  1116
        |||||||||||||||||||||||||||||||||||
Db 1200 TGGAAGGAGGAGAGGTTCTCCAGAGTCGGAACTGA  1235
```

RESULT 3
US-09-964-824A-563

; Sequence 563, Application US/09964824A
; Patent No. US2002102531A1
; GENERAL INFORMATION:
; APPLICANT: Horrigan, Stephen
; TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
; TITLE OF INVENTION: Sets
; FILE REFERENCE: 689290-73
; CURRENT APPLICATION NUMBER: US/09/964,824A
; CURRENT FILING DATE: 2001-09-27
; PRIOR APPLICATION NUMBER: US/60/236,033
; PRIOR APPLICATION FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,032
; PRIOR APPLICATION FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,028
; PRIOR APPLICATION FILING DATE: 2000-09-28
; NUMBER OF SEQ ID NOS: 583
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 563
; LENGTH: 1915
; TYPE: DNA

```
Db    1080 AACAGCAACATGACCTACGAGAAGCTGAGCCGGCCATGAGGTACTACAAACGGGAG 1139

Qy    1021 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACACAAGTTTGGCAAAAACTCAAGCGGC 1080
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1140 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACACAAGTTTGGCAAAAACTCAAGCGGC 1199

Qy    1081 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1116
           ||||||||||||||||||||||||||||||||||||
Db    1200 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1235


RESULT 4
US-09-880-107-3420
; Sequence 3420, Application US/09880107
; Patent No. US20020142981A1
; GENERAL INFORMATION:
;  APPLICANT: Horne, Darci T.
;  APPLICANT: Vockley, Joseph G.
;  APPLICANT: Scherf, Uwe
;  APPLICANT: Gene Logic, Inc.
;  TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
;  FILE REFERENCE: 44921-5028-WO
;  CURRENT APPLICATION NUMBER: US/09/880,107
;  CURRENT FILING DATE: 2001-06-14
;  PRIOR APPLICATION NUMBER: US 60/211,379
;  PRIOR FILING DATE: 2000-06-14
;  PRIOR APPLICATION NUMBER: US 60/237,054
;  PRIOR FILING DATE: 2000-10-02
;  NUMBER OF SEQ ID NOS: 3950
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3420
;  LENGTH: 1915
;  TYPE: DNA
;  ORGANISM: Homo sapiens
;  FEATURE:
;  OTHER INFORMATION: Genbank Accession No. US20020142981A1 U73843
US-09-880-107-3420

  Query Match             100.0%;  Score 1116;  DB 10;  Length 1915;
  Best Local Similarity   100.0%;  Pred. No. 2e-313;
  Matches 1116;  Conservative   0;  Mismatches   0;  Indels   0;  Gaps   0;

Qy       1 ATGGCTGCAACTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGCGATGTACAGC 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     120 ATGGCTGCAACTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGCGATGTACAGC 179

Qy      61 TCGGAGGACTCCACCCTGCCCTGGCCTCGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 120
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     180 TCGGAGGACTCCACCCTGCCCTGGCCTCGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 239

Qy     121 GTACTGACCCTGAGCAACCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     240 GTACTGACCCTGAGCAACCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 299

Qy     181 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCGGACTCAGCTACCAAGTG 240
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     300 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCGGACTCAGCTACCAAGTG 359

Qy     241 GAGAAGAACAAGTACGACGACCAAGCGCCATTGACTTCCACGATGTGACATGGATGGCGCC 300
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     360 GAGAAGAACAAGTACGACGACCAAGCGCCATTGACTTCCACGATGTGACATGGATGGCGCC 419

Qy     301 ACCCTCTGCAATTGTGCCCTTGAGGAGTGCGTCTTTGGGGTCTTTGGGGGGACCAA 360
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     420 ACCCTCTGCAATTGTGCCCTTGAGGAGTGCGTCTTTGGGGTCTTTGGGGGGACCAA 479

Qy     361 CTCCATGCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 420
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     480 CTCCATGCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 539

Qy     421 GAGCTGCTGAGAAGGATGCCATGCCCTTCCAGGAGCCCCAGGGCCCTTTGAC 480
           ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     540 GAGCTGCTGAGAAGGATGCCATGCCCTTCCAGGAGCCCCAGGGCCCTTTGAC 599
```

```
Db     481 CAGGGCAGCCCCTTGCCCAGAGAGCTGCTGACGACGACGGTCAGCAAGCCAGCCCTACCAC 540
           ||||||||||||||||||||||||||||||| |||| |||||||||||||||||||||||
Db     600 CAGGGCAGCCCCTTGCCCAGAGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCTACCAC 659

Qy     541 CCCGGCAGCTGTGGCGCGAGGAGCCCCTCCCCCGCGCTCCACCGCAGGG 600
           |||||||||||||||||||||||||||||| ||||||||||||| |||
Db     660 CCCGGCAGCTGTGGCGCGAGGAGCCCCTCCCCTGCGAGCTCTGACGTCTCCACCGCGAGGG 719

Qy     601 ACTGGTGCTTCTCGGAGCTCCAGACTCCGGTGAAGTGACGTGGACCTGAT 660
           ||||||||||||||||||||||||||||||||||||||||||||||||||
Db     720 ACTGGTGCTTCTCGGAGCTCCAGACTCCGGTGAAGTGACGTGGACCTGAT 779

Qy     661 CCACTGATGGCAAGCTCTTCCCAGCGATGGTTTCGTGACTGCAAGAAGGGGGATCCC 720
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     780 CCACTGATGGCAAGCTCTTCCCAGCGATGGTTTCGTGACTGCAAGAAGGGGGATCCC 839

Qy     721 AAGCACGGGAAAGCGGAAACGAGGCGGGCCCGAAAGCTGAGCAAAGTACTGGGACTGT 780
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     840 AAGCACGGGAAAGCGGAAACGAGGCGGGCCCGAAAGCTGAGCAAAGTACTGGGACTGT 899

Qy     781 CTCGAGGGCAAGAAGAGAGCACGCGCCCCAGAGGCACCCACCTGTGGAGTTCATCCGG 840
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     900 CTCGAGGGCAAGAAGAGAGCACGCGCCCCAGAGGCACCCACCTGTGGAGTTCATCCGG 959

Qy     841 GACATCCTCATCCACCCCGGAGCTCAACGAGCGGCCTCATGAAGTGGGAGAATGGCATGAA 900
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     960 GACATCCTCATCCACCCCGGAGCTCAACGAGCGGCCTCATGAAGTGGGAGAATGGCATGAA 1019

Qy     901 GGGCTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 960
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1020 GGGCTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1079

Qy     961 AACAGCAACATGACCTACGAGAAGCTGAGCCGGCCATGAGGTACTACTACAAACGGGAG 1020
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1080 AACAGCAACATGACCTACGAGAAGCTGAGCCGGCCATGAGGTACTACTACAAACGGGAG 1139

Qy     1021 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACACAAGTTTGGCAAAAAACTCAAGCGGC 1080
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1140 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACACAAGTTTGGCAAAAAACTCAAGCGGC 1199

Qy     1081 TGGAAGGAGGAAGAGGTTCTTCCAGAGTCGGAACTGA 1116
           |||||||||||||||||||||||||||||||||||||
Db     1200 TGGAAGGAGGAAGAGGTTCTTCCAGAGTCGGAACTGA 1235


RESULT 5
US-09-967-768A-192
; Sequence 192, Application US/09967768A
; Patent No. US20020150877A1
; GENERAL INFORMATION:
;  APPLICANT: Augustus, Meena
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signat
;  TITLE OF INVENTION: Sets
;  FILE REFERENCE: 689290-72
;  CURRENT APPLICATION NUMBER: US/09/967,768A
;  CURRENT FILING DATE: 2001-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,109
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,034
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,111
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 325
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 192
;  LENGTH: 1915
;  TYPE: DNA
;  ORGANISM: Homo sapiens
US-09-967-768A-192

  Query Match             100.0%;  Score 1116;  DB 10;  Length 1915;
  Best Local Similarity   100.0%;  Pred. No. 2e-313;
```

Matches 1116; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy      1 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    120 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 179

Qy     61 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    180 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 239

Qy    121 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    240 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 299

Qy    181 GGGGAACAGCCCCAGTTCTGGTGCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 240
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    300 GGGGAACAGCCCCAGTTCTGGTGCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 359

Qy    241 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 300
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    360 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 419

Qy    301 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCGTCTTGGTCTTTGGGCCTCTGGGGACCAA 360
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    420 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCGTCTTGGTCTTTGGGCCTCTGGGGACCAA 479

Qy    361 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 420
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    480 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 539

Qy    421 GAGCTGCTTGGAGAAGGATGGCATGGCCTTCCAGGAGACCCCTAGACCCAGGGCCCTTTGAC 480
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    540 GAGCTGCTTGGAGAAGGATGGCATGGCCTTCCAGGAGACCCCTAGACCCAGGGCCCTTTGAC 599

Qy    481 CAGGGCAGCCCTTTGCCCAGAGCTGCTGGACGACCGTCAGCAAGCCAGCCCTACCAC 540
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    600 CAGGGCAGCCCTTTGCCCAGAGCTGCTGGACGACCGTCAGCAAGCCAGCCCTACCAC 659

Qy    541 CCCGGCCAGCTGTGGCGCGCAGGAGCCCCTCCCCTGGCAGCTCGCAGTCTCCACCGCAGGG 600
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    660 CCCGGCCAGCTGTGGCGCGCAGGAGCCCCTCCCCTGGCAGCTCGCAGTCTCCACCGCAGGG 719

Qy    601 ACTCGTGCTTCTCGGAGCTCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGACCTGGAT 660
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    720 ACTCGTGCTTCTCGGAGCTCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGACCTGGAT 779

Qy    661 CCCACTGATGGCAAGCTGCTCTTCCCGATGGTTTTCGTGACTGCAAGGGGGATCCC 720
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    780 CCCACTGATGGCAAGCTGCTCTTCCCGATGGTTTTCGTGACTGCAAGGGGGATCCC 839

Qy    721 AAGCACGGGAAGCGGAAAACGGAGAGCGGCGCCCGAAAGTGAGCAAAAGAGTACTGGGACTGT 780
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    840 AAGCACGGGAAGCGGAAAACGGAGAGCGGCGCCCGAAAGTGAGCAAAAGAGTACTGGGACTGT 899

Qy    781 CTCGAGGGCAAGAGCAAGAGAGCAAGCAGCACGCGCCACCCACCTGTGGGAGTTCATCCGG 840
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    900 CTCGAGGGCAAGAGCAAGAGAGCAAGCAGCACGCGCCACCCACCTGTGGGAGTTCATCCGG 959

Qy    841 GACATCCTCACCCGAGCTCAACGAGTGGGAGAATCGGCATGAA 900
          |||||||||||||||||||||||||||||||||||||||||||
Db    960 GACATCCTCACCCGAGCTCAACGAGTGGGAGAATCGGCATGAA 1019

Qy    901 GGCGTCTTCAAGTTCCTGCCCTCCAGGCGTGTGCCGCCTCCGGCCATGAGCTCCGGGCTGCCGAGCTCCGGGCCGTGTGCCGCC 960
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1020 GGGCGTCTTCAAGTTCCTGCCCTCCAGGCGTGTGCCGCCTCCGGCCATGAGCTCCGGGGGGCCCAAAAGAAAAAG 1079

Qy    961 AACAGCAACATGACCTACGACGAAGCTGAGCCGGCCATGAGTGAGGTACTACTACAAACGGGAG 1020
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1080 AACAGCAACATGACCTACGACGAAGCTGAGCCGGCCATGAGTGAGGTACTACTACAAACGGGAG 1139

Qy   1021 ATCCTGGAACGGGGTGATGCCGGGCGACTCGTCTACAAGTTGGCAAAAACTCAAGCGC 1080
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1140 ATCCTGGAACGGGGTGATGCCGGGCGACTCGTCTACAAGTTGGCAAAAACTCAAGCGC 1199
```

RESULT 6
US-09-922-217-1105
; Sequence 1105, Application US/0992 2217
; Patent No. US2002076414A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole Lynn
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C13
; CURRENT APPLICATION NUMBER: US/09/922,217
; CURRENT FILING DATE: 2001-08-03
; NUMBER OF SEQ ID NOS: 1124
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
; LENGTH: 1917
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-922-217-1105

Query Match   100.0%; Score 1116; DB 9; Length 1917;
Best Local Similarity 100.0%; Pred. No. 2e-313;
Matches 1116; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy      1 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    122 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 181

Qy     61 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    182 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 241

Qy    121 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    242 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 301

Qy    181 GGGGAACAGCCCCAGTTCTGGTGCGAAGACGCAAGCGCCAGGTTCTGGACTGGATCAGCTACCAAGTG 240
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    302 GGGGAACAGCCCCAGTTCTGGTGCGAAGACGCAAGCGCCAGGTTCTGGACTGGATCAGCTACCAAGTG 361

Qy    241 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 300
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    362 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 421

Qy    301 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCGTCTTGGTCTTTGGGGCCTCTGGGGGACCAA 360
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    422 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCGTCTTGGTCTTTGGGGCCTCTGGGGGACCAA 481

Qy    361 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 420
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    482 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 541

Qy    421 GAGCTGCTTGGAGAAGGATGGCATGGCCTTCCAGGAGCCCTAGACCCAGGGCCCTTTGAC 480
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    542 GAGCTGCTTGGAGAAGGATGGCATGGCCTTCCAGGAGCCCTAGACCCAGGGCCCTTTGAC 601

Qy    481 CAGGGCAGCCCCTTTGCCCAGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCTACCAC 540
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    481 CAGGGCAGCCCCTTTGCCCAGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCTACCAC 540
```

```
;  LENGTH: 1917
;  TYPE: DNA
;  ORGANISM: Homo sapiens
US-10-025-380-1105

Query Match             100.0%;  Score 1116;  DB 14;  Length 1917;
Best Local Similarity   100.0%;  Pred. No. 2e-311;
Matches 1116;  Conservative 0;  Mismatches 0;  Indels 0;  Gaps 0;

Qy      1  ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC  60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    122  ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC  181

Qy     61  TCGGAGGACTCCACCCTGGCCTCGTTCCCCTGTCGTCCCCTGTCGTCCCCTGGGGCGATGACTTG  120
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    182  TCGGAGGACTCCACCCTGGCCTCGTTCCCCTGTCGTCCCCTGTCGTCCCCTGGGGCGATGACTTG  241

Qy    121  GTACTGACCCTGAGCAACCCCAGATGTCATTGGAGGGTACAGAGAGGCCAGCTGGTTG  180
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    242  GTACTGACCCTGAGCAACCCCAGATGTCATTGGAGGGTACAGAGAGGCCAGCTGGTTG  301

Qy    181  GGGGAACAGCCCCAGTTCTGGTTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG  240
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    302  GGGGAACAGCCCCAGTTCTGGTTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG  361

Qy    241  GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGATGGCGCC  300
           ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    362  GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGATGGCGCC  421

Qy    301  ACCCTCGAATTGTGCCCTTGAGGAGCTGGCTCGTTCGGGCTTCTCGGGGGACCAA  360
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    422  ACCCTCGAATTGTGCCCTTGAGGAGCTGGCTCGTTCGGGCTTCTCGGGGGACCAA  481

Qy    361  CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT  420
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    482  CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT  541

Qy    421  GAGCTGCTGGAGAAGGAGGATGGCATGGCCTTCCCAGGAGGCCTAGACCCAGGGCCCTTTGAC  480
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    542  GAGCTGCTGGAGAAGGAGGATGGCATGGCCTTCCCAGGAGGCCTAGACCCAGGGCCCTTTGAC  601

Qy    481  CAGGGCAGCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAGGCCAGCCCCTACCAC  540
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    602  CAGGGCAGCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAGGCCAGCCCCTACCAC  661

Qy    541  CCCGGCAGCTGTGGGCGCAGGAGCCCCCTCCCCTGGCAGTCTCCGACGTCTCCACCGCAGGG  600
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    662  CCCGGCAGCTGTGGGCGCAGGAGCCCCCTCCCCTGGCAGTCTCCGACGTCTCCACCGCAGGG  721

Qy    601  ACTGTGCTTCTCGGAGCTCCGAGCTCCGGTGGAAGTGACGTGGAGTGACCTGGAT  660
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    722  ACTGGTGCTTCTCGGAGCTCCGAGCTCCGGTGGAAGTGACGTGGAGTGACCTGGAT  781

Qy    661  CCCACTGATGGCAAGCTCTTCCCAGCGATGGTTTCGTGACTGCAAGAGGGGGATCCC  720
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    782  CCCACTGATGGCAAGCTCTTCCCAGCGATGGTTTCGTGACTGCAAGAGGGGGATCCC  841

Qy    721  AAGCACGGGAAGCGGAAACGAGGCCGGCGCCCGCGAAAGTGAGCAAAGAGTACTGGGACTGT  780
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    842  AAGCACGGGAAGCGGAAACGAGGCCGGCGCCCGCGAAAGTGAGCAAAGAGTACTGGGACTGT  901

Qy    781  CTCGAGGGCAAGAGAGCAAGCAGCACGCGCCCAGAGGCACCACCTGTGGGAGTTCATCCGG  840
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    902  CTCGAGGGCAAGAGAGCAAGCAGCACGCGCCCAGAGGCACCACCTGTGGGAGTTCATCCGG  961

Qy    841  GACATCCTCATCCACCCGGAGCTCAACAGAGGGCCTCATGAGTGAGTGGGAGAATCGGCATGAA  900
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    962  GACATCCTCATCCACCCGGAGCTCAACAGAGGGCCTCATGAGTGAGTGGGAGAATCGGCATGAA  1021

Qy    901  GGCGTCTTCAAGTTCCTGCGCTCGGAGCTGTGCCCAACTATGGGCCAAAGAAAAG  960
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1022  GGCGTCTTCAAGTTCCTGCGCTCGGAGCTGTGCCCAACTATGGGCCAAAGAAAAG  1081
```

```
Db    602  CAGGGCAGCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAGGCCAGCCCCTACCAC  661
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy    541  CCCGGCAGCTGTGGGCGCAGGAGCCCCCTCCCCTGGCAGTCTCCGACGTCTCCACCGCAGGG  600
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    662  CCCGGCAGCTGTGGGCGCAGGAGCCCCCTCCCCTGGCAGTCTCCGACGTCTCCACCGCAGGG  721

Qy    601  ACTGTGCTTCTCGGAGCTCCGAGCTCCGGTGGAAGTGACGTGGAGTGACCTGGAT  660
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    722  ACTGGTGCTTCTCGGAGCTCCGAGCTCCGGTGGAAGTGACGTGGAGTGACCTGGAT  781

Qy    661  CCCACTGATGGCAAGCTCTTCCCAGCGATGGTTTCGTGACTGCAAGAGGGGGATCCC  720
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    782  CCCACTGATGGCAAGCTCTTCCCAGCGATGGTTTCGTGACTGCAAGAGGGGGATCCC  841

Qy    721  AAGCACGGGAAGCGGAAACGAGGCCGGCGCCCGCGAAAGTGAGCAAAGAGTACTGGGACTGT  780
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    842  AAGCACGGGAAGCGGAAACGAGGCCGGCGCCCGCGAAAGTGAGCAAAGAGTACTGGGACTGT  901

Qy    781  CTCGAGGGCAAGAGAGCAAGCAGCACGCGCCCAGAGGCACCACCTGTGGGAGTTCATCCGG  840
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    902  CTCGAGGGCAAGAGAGCAAGCAGCACGCGCCCAGAGGCACCACCTGTGGGAGTTCATCCGG  961

Qy    841  GACATCCTCATCCACCCGGAGCTCAACAGAGGGCCTCATGAGTGAGTGGGAGAATCGGCATGAA  900
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    962  GACATCCTCATCCACCCGGAGCTCAACAGAGGGCCTCATGAGTGAGTGGGAGAATCGGCATGAA  1021

Qy    901  GGCGTCTTCAAGTTCCTGCGCTCGGAGCTGTGCCCAACTATGGGCCAAAGAAAAG  960
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1022  GGCGTCTTCAAGTTCCTGCGCTCGGAGCTGTGCCCAACTATGGGCCAAAGAAAAG  1081

Qy    961  AACAGCAACAATGACCTACGAGAAGTGAGCGGCGGCGGCGGGCCATGAGTGGGAGG  1020
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1082  AACAGCAACAATGACCTACGAGAAGTGAGCGGCGGCGGCGGGCCATGAGTGGGAGG  1141

Qy   1021  ATCCTGAACGGGTGATGGCCGGCGGCGACTCGTCTACAAGTTTGGCAAAACTCAAGCGGC  1080
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1142  ATCCTGAACGGGTGATGGCCGGCGGCGACTCGTCTACAAGTTTGGCAAAACTCAAGCGGC  1201

Qy   1081  TGGAAGGAGGAAGAGAGGTTCTCCAGAGTGCGGAACTGA  1116
           |||||||||||||||||||||||||||||||||||||||
Db   1202  TGGAAGGAGGAAGAGAGGTTCTCCAGAGTGCGGAACTGA  1237
```

RESULT 7
US-10-025-380-1105

; Sequence 1105, Application US/10025380
; Publication No. US20020182191A1
GENERAL INFORMATION:

; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole L.
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Skeiky, Yasir A. W.
; APPLICANT: Fanger, Gary R.
; APPLICANT: Vedvick, Thomas S.
; APPLICANT: Carter, Darrick

; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C14
; CURRENT APPLICATION NUMBER: US/10/025,380
; CURRENT FILING DATE: 2001-12-19
; NUMBER OF SEQ ID NOS: 1129
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105

```
Db    621 CAGGGCAGCCCCTTTGCCCAGAGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCTACCAC   680
          ||||||||||||||||||||||||||||||||||||||||:||||||||||||||||||||
Qy    541 CCCGGCAGCGTGTGGCGCGAGGAGCCCCTCCCCTCGGACGCTCCGACGGTCTCCACCGCAGGG   600
          |||||||||||| ::|||||||||||||||:|||||||:|||||||||||||||||||||
Db    681 CCCGGCAGCGTGTGGCGCGAGGAGCCCCTCCCCTCCCYGGACGCTCCGACGGTCTCCACCGCAGTGT   740
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy    601 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTCGGAT   660
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    741 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTCGGAT   800
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy    661 CCCACTGATGGCAAGTCTTCCCCAGCGATGGTTTCGTGACTGCAAGAAGGGGGATCCC   720
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    801 CCCACTGATGGCAAGTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC   860
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy    721 AAGCACCGGAAGCGAAACGAGCCCGGCCGGCCCCAAAGCTGAGCAAAGAGTACTGGGACTGT   780
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    861 AAGCACCGGAAGCGAAACGAGCCCGGCCCCCAAAGCTGAGCAAAGAGTACTGGGACTGT   920
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy    781 CTCGAGGGCAAGAAGAGCAAGCACGCGGCCACCGTGGGAGTTCATCCGG   840
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    921 CTCGAGGGCAAGAAGAGCAAGCACGCGGCCACCGTGGGAGTTCATCCGG   980
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy    841 GACATCCTCATCCACCCGGAGTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA   900
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    981 GACATCCTCATCCACCCGGAGTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA   1040
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy    901 GGGTCTTCAAGTTCCTGCGCTTCGGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG   960
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1041 GGGTCTTCAAGTTCCTGCGCTTCGGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG   1100
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy    961 AACAGCAACATGACCTACGAGAAGCTGAGCCGGCCGGCCATGAGTACTACAAACGGGAG   1020
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1101 AACAGCAACATGACCTACGAGAAGCTGAGCCGGCCGGCCATGAGTACTACAAACGGGAG   1160
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy   1021 ATCCTGGAACGGTGATGCCGGCCGACTCGCTACAAGTTTGGCAAAAACTCAAGCGGC   1080
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1161 ATCCTGGAACGGTGATGCCGGCCGACTCGCTACAAGTTTGGCAAAAACTCAAGCGGC   1220
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy   1081 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA   1116
          ||||||||||||||||||||||||||||||||||||
Db   1221 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA   1256
```

RESULT 8
US-09-925-301-207
; Sequence 207, Application US/09925301
; Patent No. US20020052308A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
; FILE REFERENCE: PA106
; CURRENT APPLICATION NUMBER: US/09/925,301
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: PCT/US00/05882
; PRIOR FILING DATE: 2000-03-08
; PRIOR APPLICATION NUMBER: 60/124,270
; PRIOR FILING DATE: 1999-03-12
; NUMBER OF SEQ ID NOS: 1694
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 207
; LENGTH: 1996
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-925-301-207

Query Match   100.0%; Score 1115.6; DB 9; Length 1996;
Best Local Similarity 99.9%; Pred. No. 2.7e-313;
Matches 1115; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```
Qy    1 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC    60
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  141 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC   200
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy   61 TCGGAGGACTTCCACCTGCCTCTTGTTCCCCTGCTGCCACCTTTGGGGCCGATGACTTG   120
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  201 TCGGAGGACTTCCACCTGCCTCTTGTTCCCCTGCTGCCACCTTTGGGGCCGATGACTTG   260
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy  121 GTACTGACCCTGAGCAACCCCAGATGTCATTGAGAGGGTACAGAGAAGGCCAGCTGGTTG   180
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  261 GTACTGACCCTGAGCAACCCCAGATGTCATTGAGAGGGTACAGAGAAGGCCAGCTGGTTG   320
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy  181 GGGAACAGCCCAGTTCTCGTCGAAGACGCAGTTCTGGACTGATCAGCTACCAAGTG   240
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  321 GGGAACAGCCCAGTTCGTCGAAGACGCAGTTCTGGACTGATCAGCTACCAAGTG   380
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy  241 GAGAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC   300
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  381 GAGAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC   440
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy  301 ACCCTCTGCAATTGTGCCCTGAGAGCTGCGTCGTCGGTCTTTGGGGCCTCTGGGGGACCAA   360
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  441 ACCCTCTGCAATTGTGCCCTGAGAGCTGCGTCGTCGGTCTTTGGGGCCTCTGGGGGACCAA   500
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy  361 CTCCATGCCCAGCTGCGAGACCTGCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT   420
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  501 CTCCATGCCCAGCTGCGAGACCTGCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT   560
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy  421 GAGCTGCTGGAGAAGGAATGGCATGGCCTTCCAGGAGGCCCTTTGAC   480
        ||||||||||||||||||||||||||||||||||||||||||||||||
Db  561 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTTTGAC   620
        ||||||||||||||||||||||||||||||||||||||||||||||||
Qy  481 CAGGGCAGCCCCTTTGCCCAGAGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCTACCAC   540
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

RESULT 9
US-10-264-049-756
; Sequence 756, Application US/10264049
; Publication No. US20040005579A1
; GENERAL INFORMATION:
; APPLICANT: Birse et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
; FILE REFERENCE: PA133P1
; CURRENT APPLICATION NUMBER: US/10/264,049
; CURRENT FILING DATE: 2002-10-04
; PRIOR APPLICATION NUMBER: PCT/US01/18569
; PRIOR FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: US 60/209,467
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 4360
; SOFTWARE: PatentIn Ver. 3.1
; SEQ ID NO 756
; LENGTH: 1956
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-264-049-756

Query Match   99.9%; Score 1114.4; DB 12; Length 1956;
Best Local Similarity 99.6%; Pred. No. 5.9e-313;
Matches 1112; Conservative 4; Mismatches 4; Indels 0; Gaps 0;

```
Qy    1 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC    60
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  161 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC   220
```

```
RESULT 10
US-10-131-410-64
; Sequence 64, Application US/10131410
; Publication No. US20030235915A1
; GENERAL INFORMATION:
;   APPLICANT: SPECHT, THOMAS
;   APPLICANT: HINZMANN, BERND
;   APPLICANT: SCHMITT, ARMIN
;   APPLICANT: PILARSKY, CHRISTIAN
;   APPLICANT: DAHL, EDGAR
;   APPLICANT: ROSENTHAL, ANDRE
;   TITLE OF INVENTION: HUMAN NUCLEIC ACID SEQUENCES FROM TISSUE OF BREAST
;   TITLE OF INVENTION: TUMORS
;   FILE REFERENCE: SCH-1763
;   CURRENT APPLICATION NUMBER: US/10/131,410
;   CURRENT FILING DATE: 2002-04-25
;   PRIOR APPLICATION NUMBER: 09/646,673
;   PRIOR FILING DATE: 2000-09-20
;   PRIOR APPLICATION NUMBER: PCT/DE99/00908
;   PRIOR FILING DATE: 1999-03-19
;   NUMBER OF SEQ ID NOS: 202
;   SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 64
;   LENGTH: 2269
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-131-410-64

  Query Match             83.6%;  Score 933;  DB 12;  Length 2269;
  Best Local Similarity   99.3%;  Pred. No. 2.7e-260;
  Matches  958;  Conservative    0;  Mismatches    0;  Indels    5;  Gaps    2;

Qy     152 TGGAGGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTCGTGTGAAGACGC 211
               ||||||||||||||||||||||||||||||||||||||||||||||||| |||||||
Db       4 TGGCCCTTGCAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTCGTGTGAAGA-GC 62

Qy     212 AGGTTCTGGACTGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCGCAAGCGCCATTG 271
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      63 AGGTTCTGGACTGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCGCAAGCGCCATTG 122

Qy     272 ACTTCCACGATGTGACATGGATGCGCCACCCTGCAATTGTGCCCTTGAGGAGCTGC 331
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     123 ACTTCCACGATGTGACATGGATGCGCCACCCTGCAATTGTGCCCTTGAGGAGCTGC 182

Qy     332 GTCTGGTCTTTGGGGCCTCTGGGGACCAACTCCATGCCCGAGACCTCACTTCCA 391
           |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     183 GTCTGGTCTTTGGGGCCTCTGGGGACCAACTCCATGCCCGAGACCTCACTTCCA 242

Qy     392 GCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTCTGGAGAAGGATGGCATGGCCTTCC 451
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     243 GCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTCTGGAGAAGGATGGCATGGCCTTCC 302

Qy     452 AGGAGGCCCTAGACCCAGGGCCCTTTGCCCAGGAGAGCCCCCTCG 511
           |||||||||||||||||||||||||||||||||||||||||||||
Db     303 AGGAGGCCCTAGACCCAGGGCCCTTTGCCCAGGAGAGCCCCCTCG 362

Qy     512 ACGACGGTCAGCAAGCCAGCCCTACCACCCCGCAGCTGGTGCGGCAGCTGGTGCTGG 571
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     363 ACGACGGTCAGCAAGCCAGCCCTACCACCCCGCAGCTGGTGCGGCAGCTGGTGCTGG 422

Qy     572 CTGGCAGCTCTGCGAGTCTCCACCTGCTTCTGAGCTGCTTCTCGGAGCTCCCACTCCTCAG 631
           ||||||||||||||||||||||||||||||||   |||||||||||||||||||||||||
Db     423 CTGGCAGCTCTGCGAGTCTCCACCTGCTGCTGCA-GGACTGGTGCTTCTCGGAGCTCCCACTCCTCAG 481

Qy     632 ACTCCGGTGGAAGTGACGTGACCGGATG 691
           ||||||||||||||||||||||||||||
Db     482 ACTCCGGTGGAAGTGACGTGACCGGATG 541

Qy     692 GTTTTCGTGACTGCAAGAAGGGGATCCCAAGCACGGGAAACGAGGCGGCCCC 751
           |||||||||||||||||||||||||||||||||||||||||||||||||||
Db     542 GTTTTCGTGACTGCAAGAAGGGGATCCCAAGCACGGGAAACGAGGCGGCCCC 601

Qy     752 GAAAGTTGAGCAAAGTACTGGACTGTCTCGAGGGCAAGAGAGCACGCGCCCA 811
```

```
Qy      61 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     221 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 280

Qy     121 GTACTGACCCTGAGCAACCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     281 GTACTGACCCTGAGCAACCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 340

Qy     181 GGGGAACAGCCCCAGTTCTCTGGACTGGATCAGCTGGATCAGCTACCAAGTG 240
           ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     341 GGGGAACAGCCCCAGTTCTCTGGACTGGATCAGCTGGATCAGCTACCAAGTG 400

Qy     241 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCCACGATGTGACATGGATGCGCC 300
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     401 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCCACGATGTGACATGGATGCGCC 460

Qy     301 ACCCTCTGCAATGTGCCCTTGAGGAGCTGCGCCCTCTGTCTTTGGGGCCTCTGGGGACCAA 360
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     461 ACCCTCTGCAATGTGCCCTTGAGGAGCTGCGCCCTCTGTCTTTGGGGCCTCTGGGGACCAA 520

Qy     361 CTCCATGCCCAGCTGCCGAGACCTCACTTCCAGCTCTTCACTTCCAGCTGATGAGCTGGATCATT 420
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     521 CTCCATGCCCAGCTGCCGAGACCTCACTTCCAGCTCTTCACTTCCAGCTGATGAGCTGGATCATT 580

Qy     421 GAGCTGCTGGAGAAGGATGGCATGGCCCTTAGACCCAGGGCCCTTTGAC 480
           |||||||||||||||||||||||||||||||||||||||||||||||||
Db     581 GAGCTGCTGGAGAAGGATGGCATGGCCCTTAGACCCAGGGCCCTTTGAC 640

Qy     481 CAGGGCAGCCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 540
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     641 CAGGGCAGCCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 700

Qy     541 CCCGGCAGCTGTGCGCGCAGGAGGCCCCCTCCCCGCGAGCGTCTCCACCGCCGAGGG 600
           |||||||||||||||||||||||||||||||||| :||  ||||||||||||||||
Db     701 CCCGGCAGCTGTGCGCGCAGGAGGCCCCCTCCCCGYGGCCAGCGTCTCCACCGCCGAGGG 760

Qy     601 ACTGGTGCTTCTCGGAGCTCCGTGAAGTGACGTGGAGTCGCGTGGACTGGAT 660
           ||||||||||||||||||||   |||||||||||||||||||||||||||||
Db     761 ACTGGTGCTTCTCGGAGCTCCGCAGACTCCGTGAAGTGACGTGGAGTCGCGTGGACTGGAT 820

Qy     661 CCCACTGACTGGCAAGCTGCTCTTCCCCAGCGATGGTTTCGTGACTGCAAGGAAGGGGATCCC 720
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     821 CCCACTGACTGGCAAGCTGCTCTTCCCCAGCGATGGTTTCGTGACTGCAAGGAAGGGGATCCC 880

Qy     721 AAGCACGGGAAACGAGGCAAGCAGAGTACTGGGACTGT 780
           ||||||||||||||||||||||||||||||||||||||
Db     881 AAGCACGGGAAACGAGGCAAGCAGAGTACTGGGACTGT 940

Qy     781 CTTCGAGGGCAAGAAGCACGCGCCCAGAGCCAGGAGTTCATCCGG 840
           |||||||||||||||||||||||||||||||||||||||||||||
Db     941 CTTCGAGGGCAAGAAGCACGCGCCCAGAGCCAGGAGTTCATCCGG 1000

Qy     841 GACATCCTCATCCACCCGAGCTCAAGAGAGGGGCGCTCAATGGGGAGAATGGGCATGAA 900
           ||||||||||||||||||||||||| ::  |||||||||  |||||||||| |||||||
Db    1001 GACATCCTCATCCACCCGAGCTCYAACGAGGGGCCTYATGAAGTGGGAGAATCGGCATGAA 1060

Qy     901 GGGGTTCTTCAAGTTCCTGGCCCAACTATGGGGCCCAAATAGGGCCAAAGAAAAAG 960
           |||||||||||||||||||  ||||||||||||||||||||||||||||||||||
Db    1061 GGGGTTCTTCAAGTTCCTGGCGGYTCCGGGTGTGCCCAACTATGGGGCCCAAATAGGGCCAAAGAAAAAG 1120

Qy     961 AACAGCAACATGACCTACGAGAAGCTACTAGAGGTACTACTACAAACGGGAG 1020
           |||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1121 AACAGCAACATGACCTACGAGAAGCTACTAGAGGTACTACTACAAACGGGAG 1180

Qy    1021 ATCCTGGAACGGGTGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCCGC 1080
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1181 ATCCTGGAACGGGTGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCCGC 1240

Qy    1081 TGGAGGAAGAAGAGTTCTCCAGAGTCGGAACTGA 1116
           |||||||  |||||||||||||||||||||||||
Db    1241 TGGAGGAGGAAGAGAGTTCTCCAGAGTCGGAACTGA 1276
```

```
Db   602 GAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGGAGGCAAGAGAGCAAGCACGCGCCCA 661
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy   812 GAGGCACCCACCTGTGGGAGTTCATCCGGAGACATCCTCATCCACCCGGAGCTCAACGAGG 871

Db   662 GAGGCACCCACCTGTGGGAGTTCATCCGGAGACATCCTCATCCACCCGGAGCTCAACGAGG 721
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy   872 GCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCTTGCGCTTCCGAGGCTG 931

Db   722 GCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCTTGCGCTTCCGAGGCTG 781
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy   932 TGGCCCAACTATGGGCCAAAAGAAAAAGAACAGCAACATGACCTACGAGGAGCTGAGCC 991

Db   782 TGGCCCAACTATGGGCCAAAAGAAAAAGAACAGCAACATGACCTACGAGGAGCTGAGCC 841
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy   992 GGGCCATGAGTACTACTACAAACGGAGATCCTGGAACGGGTGATGGCCGGCGACTCG 1051

Db   842 GGGCCATGAGTACTACTACAAACGGAGATCCTGGAACGGGTGATGGCCGGCGACTCG 901
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy  1052 TCTACAAGTTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAGAGGTTCTCCAGAGTCGGA 1111

Db   902 TCTACAAGTTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAGAGGTTCTCCAGAGTCGGA 961
         |||||
Qy  1112 ACTGA 1116

Db   962 ACTGA 966
```

RESULT 11
US-09-922-217-853/c
; Sequence 853, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
;   APPLICANT: Xu, Jiangchun
;   APPLICANT: Lodes, Michael J.
;   APPLICANT: Secrist, Heather
;   APPLICANT: Benson, Darin R.
;   APPLICANT: Meagher, Madeleine Joy
;   APPLICANT: Stolk, John A.
;   APPLICANT: Wang, Tongtong
;   APPLICANT: Jiang, Yuqiu
;   APPLICANT: Smith, Carole Lynn
;   APPLICANT: King, Gordon E.
;   APPLICANT: Wang, Aijun
;   APPLICANT: Clapper, Jonathan D.
;   TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;   TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
;   FILE REFERENCE: 210121.471C13
;   CURRENT APPLICATION NUMBER: US/09/922,217
;   CURRENT FILING DATE: 2001-08-03
;   SOFTWARE: FastSEQ for Windows Version 4.0
;   NUMBER OF SEQ ID NOS: 1124
;   SEQ ID NO 853
;   LENGTH: 626
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-922-217-853

Query Match   55.9%;   Score 624.4; DB 9; Length 626;
Best Local Similarity 99.8%; Pred. No. 6.5e-171;
Matches 625; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy   155 AGGGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGG 214
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   626 AGGGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGAGCGCAGG 567

Qy   215 TTCTGGACTGGATCAGCTGATCAGCTGGTACCAAGTGACGAGAGAACAAGTACGACGCCATTGACT 274
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   566 TTCTGGACTGGATCAGCTGATCAGCTGGTACCAAGTGACGAGAGAACAAGTACGACGCCATTGACT 507

Qy   275 TCTCACGATGTGACATGGATGGCGCCACCCTTGACGATGGCGCACCCTTGACCCTTGACCT 334
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   506 TCTCACGATGTGACATGGATGGCGCCACCCTTGACGATGGCGCACCCTTGACCCTTGACCT 447
```

RESULT 13

US-10-025-380-853/c

; Sequence 853, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole L.
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Skeiky, Yasir A. W.
; APPLICANT: Fanger, Gary R.
; APPLICANT: Vedvick Thomas S.
; APPLICANT: Carter, Darrick
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C14
; CURRENT APPLICATION NUMBER: US/10/025,380
; CURRENT FILING DATE: 2001-12-19
; NUMBER OF SEQ ID NOS: 1129
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 853
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-025-380-853

Query Match   55.9%;   Score 624.4;   DB 14;   Length 626;
Best Local Similarity   99.8%;   Pred. No. 6.5e-171;
Matches   625;   Conservative   0;   Mismatches   1;   Indels   0;   Gaps   0;

Qy   155   AGGGTACAGAGAAGAGGCCAGCTGGTTGGGGAACAGCCCCAGTTCTCGTCGAAGACGCAGG   214
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   626   AGGGTACAGAGAAGAGGCCAGCTGGTTGGGGAACAGCCCCAGTTCTCGTCGAAGACGCAGG   567

RESULT 14

US-09-922-217-944/c

; Sequence 944, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole Lynn
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C13
; CURRENT APPLICATION NUMBER: US/09/922,217
; CURRENT FILING DATE: 2001-08-03
; NUMBER OF SEQ ID NOS: 1124
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 944
; LENGTH: 563
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-922-217-944

Query Match   50.3%;   Score 561.4;   DB 9;   Length 563;

Best Local Similarity 99.8%; Pred. No. 1.2e-152;
   Matches 562; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy  219  GGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTC  278
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  563  GGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTC  504

Qy  279  ACGATGTGACATGGATGGCGCCACCCTGGGGGACCAACTCCATCATGTGCCCTTGAGAGAGCTGCGTCTGGT  338
         |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  503  ACGATGTGACATGGATGGCGCCACCCTGGGGGACCAACTCCATCATGTGCCCTTGAGAGAGCTGCGTCTGGT  444

Qy  339  CTTTGGGCCCTCTGGGGGACCACCCTCTGCAATTGTGCCCTTGAGAGACCTCACTTCCAGCTCTTC  398
         |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  443  CTTTGGGCCCTCTGGGGGACCACCCTCTGCAATTGTGCCCTTGAGAGACCTCACTTCCAGCTCTTC  384

Qy  399  TGATGAGCTCAGTTGGATCATTGAGCTGTGGAGAAGGATGGCATGGCCTTCCAGGAGGC  458
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  383  TGATGAGCTCAGTTGGATCATTGAGCTGTGGAGAAGGATGGCATGGCCTTCCAGGAGGC  324

Qy  459  CCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGGCTTCCAGGAGGC  518
         |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  323  CCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGGCGTCGGACGACGG  264

Qy  519  TCAGCAAGCCAGCCCTACCACCCCGCAGCTGTGCGCAGGACTCGTGCTTCTCGGAGCTCCGG  578
         |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  263  TCAGCAAGCCAGCCCTACCACCCCGCAGCTGTGCGCAGGACTCGTGCTTCTCGGAGCTCCGG  204

Qy  579  CTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGG  638
         |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  203  CTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGG  144

Qy  639  TGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCGCGATGGTTTTCG  698
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  143  TGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCGCGATGGTTTTCG  84

Qy  699  TGACTGCAAGAGGGGATCCCAAGCACGGGAAACGAGGCCGGCCCGAAAGCT  758
         ||||||||||||||||||||||||||||||||||||||||||||||||||
Db  83   TGACTGCAAGAGGGGATCCCAAGCACGGGAAACGAGGCCGGCCCGAAAGCT  24

Qy  759  GAGCAAAGAGTACTGGGACTGTC  781
         |||||||||||||||||||||||
Db  23   GAGCAAAGAGTACTGGGACTGTC  1
```

RESULT 15

US-09-833-263-944/c

; Sequence 944, Application US/09833263

; Patent No. US2002011054

; GENERAL INFORMATION:

; APPLICANT: Wang, Aijun

; APPLICANT: Clapper, Jonathan D.

; APPLICANT: Stolk, John A.

; APPLICANT: Meagher, Madeleine J.

; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND

; TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE

; FILE REFERENCE: 2101121.471C12

; CURRENT APPLICATION NUMBER: US/09/833,263

; CURRENT FILING DATE: 2001-04-10

; NUMBER OF SEQ ID NOS: 1093

; SOFTWARE: FastSEQ for Windows Version 3.0

; SEQ ID NO 944

; LENGTH: 563

; TYPE: DNA

; ORGANISM: Homo sapien

US-09-833-263-944

Query Match 50.3%; Score 561.4; DB 10; Length 563;
Best Local Similarity 99.8%; Pred. No. 1.2e-152;
   Matches 562; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy  219  GGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTC  278
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  563  GGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTC  504
```

Search completed: February 13, 2004, 11:48:18
Job time : 396.438 secs